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## ESSAYS AND CASES.

ART. 1.—*Observations on the Pathology of Fever, with Strictures on the Physiological Doctrine of Broussais.*—*By* JOHN EBERLE, M. D. *Professor of Materia Medica & Obsterics in the Jefferson Medical College.*

The history of practical medicine consists of little else than a review of the doctrines which have successively risen and sunk again, concerning the nature and treatment of fever. Whatever other objects of interest or importance within the dominion of medical science may have attracted the attention of physicians, fever has at all times been viewed as presenting the most extensive and inviting field for observation and the exercise of ingenuity. It is in this department that observation and research have been most industrious in accumulating materials, and that hypothesis has luxuriated in her wildest exuberance.

When indeed it is considered that the destroying angel has made his most desolating visitations under the form of febrile epidemics; and that in the long list of human maladies *fever*

occurs in perhaps nine cases out of ten, the paramount importance of this subject is strongly forced upon our convictions.*

From a restrospective glance at the history of our science, we are forced to acknowledge that there is perhaps no subject which is more eminently calculated to humble the pride of human reason than this one. For, in relation to this subject especially, pathology has been in a continued state of revolution and instability. The human mind has been engaged with this subject for near three thousand years. Theories have risen and sunk again in a continued and rapid series of succession; each has had its hour "to strut upon the stage," and its votaries to yield it faith; but the stream of time has hitherto overturned all these insubstantial, though often highly wrought fabrics.

Has the mind then made no real advancement in relation to the pathology of fever? Are we now no nearer correct and rational views concerning this important subject, than were our forefathers? Has genius always wandered in idle quest, and brought back no substantial trophies from the regions of pathological speculation on this point? Far from it. Like the asymptotes of the parabola, the human mind is continually verging towards the point of truth, although it may never reach it in relation to the essential nature of fever. There has probably never been any theory or doctrine promulgated on this subject which did not clear away some old rubbish, or bring to fuller view some of the relations of the phenomena it presumed to elucidate. The dreams of speculation have vanished; but the facts and correct principles which

*"If we except," says Van Swieten, "those who perish by a violent death, and such as are extinguished by mere old age, and which are indeed few, almost all the rest die either of fever, or of diseases accompanied with fever. We read in Pliny with what fear and trembling the Romans endeavored to have this universal disease—*fever*, appeased by their supplications in the temple of Fanum. And hence perhaps it is that fevers are called *diseases* by Hesiod, and that Horace calls all diseases simply fevers when they rushed out of the box of Pandora—

'Post ignem ætherea domo
Subductum, Macies, et nova febrium
Terris incubuit cohors.'

*Van Swieten's Com.* vol. v. p. 1.

were necessarily mingled with them, remain as so much valuable treasure saved out of the wrecks of former systems. The mass of solid materials which has been thus gradually accumulated, has now in a great measure displaced those vague and hypothetical foundations upon which former doctrines in relation to this subject were constructed. Hypothesis is no longer tolerated in science. Philosophy does not acknowledge her as a legitimate servant. The cyclus of her empire has gone by; and the genius of rational induction is now the only power under whose direction the votary of science presses forward to conquest in the fields of knowledge.

Like many other things which are at once obvious to the senses, and concerning the existence of which almost every one can decide, *fever* does not admit of a strictly correct and unobjectionable definition; since there is not a single symptom which is invariably present, and which can be regarded as absolutely essential to its existence.

Boerhaave collected together, from a great number of authors, all the symptoms which had been observed in fevers. He then struck from this list, all those symptoms which do not appear in all, but only in certain particular modifications of fever—retaining such only as by the common consent of authors and his own observations, were found to be present in every instance of fever. The result was, that only three symptoms were left standing—namely, a quick and frequent pulse—preternatural heat of the surface of the body—and a sense of cold or chilliness in the commencement. But he might have gone further, and struck from his list these symptoms also; for it is quite certain that cases of fever do occur in which there is neither preternatural quickness and frequency of the pulse, nor an increased temperature of the surface of the body; nor is a sense of chilliness, though perhaps the most constant of all the febrile symptoms universally present in the initial stage of fever.

Notwithstanding the great difficulty, or rather impossibility of giving a strictly unexceptionable scientific definition of *fever*, yet the train of phenomena which this state of disease presents

under all its modifications—varying more or less in their concomitance and succession—offers, upon the whole, a character sufficiently distinct and definite for easy and certain recognition.

Pathologists have divided fevers—according to the mode of their development—into *idiopathic* and *symptomatic*, and the propriety or impropriety of this division constitutes, at the present day, one of the most important, and warmly contested subjects in pathology. By the former class are understood those fevers which are developed and sustained by causes, which produce a general morbid state of the system, independent of a local inflammation or fixed irritation in some part of the system. Those who admit the existence of such fevers, suppose that the remote febrific cause produces a deleterious impression on the sentient extremities of the part upon which it acts, which deranging function after function, according to the catenation of the organic sympathies, will finally result in a state of general disease, characterized by the ordinary phenomena of fever; or, as they presume, the remote cause may gradually change the healthy character of the circulating blood, which, acting as a morbific irritant on the heart and arteries, will give rise to febrile reaction.

Many highly eminent pathologists, on the contrary, contend that such fevers can have no existence; and that all febrile excitement is purely symptomatic, and of course essentially and wholly dependent on a pre-established local irritation or inflammation. According to these views, the direct influence of the remote causes of fever is limited to the production of the primary local inflammation or irritation, the subsequent pyrexial phenomena being the result solely of this primary local affection; in other words, the secondary and sympathetic excitement of the pre-established focus of irritation. At the head of those who advocate the exclusive symptomatic nature of fever is Broussais, who, whatever may be thought of his peculiar doctrines in relation to this subject, has manifested a professional zeal, an activity and acuteness of intellect, which have justly placed him high among the "greater lights" of our profession.

Not satisfied however with the adoption and defence of the general doctrine of the universality of *symptomatic* fever, Broussais contends that the inflammation or irritation whence the febrile sympathies radiate as from a focus, is almost universally located in the mucous membrane of the alimentary canal; and hence *gastro-enteritis* is with him the *fons et origo* of febrile phenomena.

That fever is a very common result of local inflammation, is unquestionable. So intimately are all the various parts of the animal body connected with each other by the ties of sympathy, that no structure or organ can be strongly irritated without causing a sympathetic irritation in other organs or structures. If the primary irritation involve the sanguiferous capillaries, the irritation will be communicated by sympathy to the general vascular system, and fever will be the result; but if the local irritation be purely nervous, it is diffused, and as it were locked up in the general nervous system, and the result will be convulsions, or some other form of general nervous affection. Without doubt too, inflammation of the mucous membrane of the alimentary canal is much more common in febrile diseases than was formerly, and by many is still supposed. It is even probable that in many instances of fever, such an inflammation exists as the *primary* and essential cause of the febrile phenomena. This may be especially the case in those instances of fever which result from the combined agencies of impure and indigestible diet and atmospheric vicissitudes. But although we may admit the correctness of these observations, yet to refer all fevers, remitting, intermitting, and continued, to a *gastro-enteritis*, as is done by Broussais and his followers, is as remote from truth as it is detrimental in its influence on practice.

The advocates of the *physiological* doctrine, as it is called, endeavor to support their sentiments in relation to this subject, both by the phenomena which are detected on post-mortem examination, and by arguments founded on physiological principles. It is affirmed that marks of inflammation occur, almost universally, in the mucous membrane of the alimentary canal,

in subjects that die of febrile affections. The capillary vessels, to a greater or less extent, of this membrane, it is said, are found injected; and in many instances other and less equivocal traces of previous inflammation are found on dissection. Admitting that such manifestations of inflammation are as universal as they are asserted to be, is there not reason to conclude, that very frequently at least, the inflammation thus detected, *supervened* during the course of the disease, as a *consequence* of the fever, rather than that the inflammation was pre-established, and became the immediate exciting cause of the febrile phenomena? We frequently see inflammations supervene in parts exposed to observation many days after general fever has been fully established. Indeed, when it is considered that in all febrile affections, the secretions which are poured into the intestinal tube are unnatural and vitiated—that the process of digestion is suspended, and consequently that fermentation and decomposition of the contents of the stomach and bowels are especially favoured—is there any cause to wonder that we should so often meet with traces of inflammation in the digestive organs in those who die of febrile affections? The Broussaian mode of treating fevers, although especially meant to obviate such inflammations, appears to me in one respect, well calculated to favour their occurrence. The almost total proscription of purgatives from the list of our remediate means for the treatment of fever, so far from lessening the tendency to gastro-enteritis, tends, I conceive, in general, to an opposite result. In a recent work by Bouillaud, there are upwards of sixty cases of fever reported, in not a single instance of which was there a purgative medicine administered by the mouth. In all of these cases however marks of inflammation, and in the majority ulcerations were detected in some portion of the mucous membrane of the bowels. That this should have been observed, will not appear strange, when it is considered that in all these cases, most of which continued from three to four weeks, all the acrid and vitiated contents of the intestines were suffered to remain, undisturbed, to act on their delicate lining membrane.

Nothing but the blind zeal which usually characterizes the disciples of a *new doctrine* could, one should suppose, induce any one to withhold a laxative under the apprehension of its causing injurious irritation, and yet suffer, without any such fears, the most irritating substances to lie quietly in the bowels. It is true, laxative *lavements* were repeatedly resorted to in these cases, but that these did not disturb or remove the acrid materials which were enclosed in the bowels, is abundantly manifest from what Mr Bouillaud himself has stated. After having gravely told us that in all the cases he describes, the traces of mucous inflammation in the bowels were *tres prononce*, he states that, "in general the stomach and small intestines were *filled with a yellowish or greenish bile, and that the residue of the alimentary substances which were found in the small and large intestines, invariably exhaled an intolerably fetid smell, and frequently exhibited the consistence of mustard. This residue, mixed with various fluids secreted in the intestines, appeared to have undergone a complete process of putrefactive decomposition, as was evident from the extreme offensiveness of the smell, and the fetid gas which distended the bowels.*"*

Can it be reasonably supposed that the transient and moderate irritation of a purgative in these cases would have been more injurious than the constant impressions of the acrid and irritating substances which were so long left in immediate contact with the bowels? It is thus, it can hardly be doubted, that many instances of gastro-enteritis, so abundant in the practice and dissections of the Broussaian school, are developed. Were laxatives employed with due moderation, it is probable, that the so much dreaded *gastro-enterite* would in some instances at least, perhaps in many, be prevented, and the world deprived af a large proportion of those triumphant demonstrations which are continually brought out in formidable array against the unbelievers of the *physiological doctrine.*

As a further offset to the evidence adduced from post mortem examination, it must be observed, that so far as the mere red-

*Traite Clinique et Eperimental des Fievres. Par J. Bouillaud. Paris, 1826.

ness or injected state of the mucous membrane is concerned, we can draw no certain inference as to the previous existence of inflammation in this structure. That these phenomena are frequently the result of changes effected in *articulo mortis*, or *post mortem*, is fully demonstrated by the observations of Mr. Yellowly and of Mr. Seeds.†

†"It must have happened to every one," says the former of these writers "accustomed to the examination of dead bodies, to see appearances of vascular injection in the villous coat of the stomach. Such appearances have very frequently been referred to inflammation, but they have probably been but little studied. I have several times been present at the examination of bodies, where the vascularity of the villous coat of the stomach was so considerable as even to give rise to suspicions that the appearance had been produced by something deleterious. I was therefore induced to embrace frequent opportunities of viewing the state of the inner surface of the stomach, and I so often found in it the appearances alluded to, as to induce me to imagine, that the opinion which is commonly entertained of their being marks of disease, is not well founded. In persons suddenly destroyed, when apparently in perfect health, he found the mucous membrane of the stomach highly injected." Mr. Seeds too found that in animals bled to death, the membraneous structures frequently exhibit a state of injection which might, at first sight, be readily mistaken for inflammation.

It is well known that the arterial tubes possess a power of contracting to a considerable extent, by what Bichat calls the contractility of texture, and that this power is not limited to the period of life, but continues some time after death. It is equally ascertained that the capillaries are endowed during life with a peculiar degree of sensibility, which causes them to resist the intromission of such fluids as they are not destined to convey in the performance of their natural functions. This peculiar sensibility, by virtue of which the serous capillaries refuse, or contract against, the intromission of red blood, would seem to depend on the regular influx of the nervous influence. That this is the case appears highly probable, if not certain, from the different results arising from the forcible injection of fluids into the arteries in living and dead animals. "Push into the aorta of a living animal, by means of a syringe, different fine fluids, and you will never see them fill the capillary system, or issue by the exhalents;" when however the same experiment is performed on an animal soon after death, the fluid will be found to pass readily into the serous capillaries, and pass out by the exhalents, excretory ducts, &c. (*Bichat.*) Mr. Buniva's experiments, quoted by Bichat, with injections upon dead and living animals, illustrate this fact in a very striking manner. He fixed the pipe of a syringe into an artery of a living animal, and on endeavouring to force the fluid into the vessel he found very great resistance, the piston passing down very slowly, and only

Broussais and his followers are indeed fully sensible of the observation of Celsus: *Neque quicquam esse stultius quam quale quid vivo homine est, tale existimare esse moriente imo jam mortuo;* for where they fail in detecting a red and injected state of the mucous membrane of the bowels, they account for its absence by ascribing it to a *post mortem* change; thus availing themselves of this fact when it affords an argument in their favour; whilst they manifest an utter unwillingness to allow any importance to it when it is adduced against their doctrine.

It cannot indeed be presumed that the injected state of the mucous membrane of the intestinal tube, so often discovered in those who die from fevers, is always, or even generally, to be ascribed to a mere post mortem change; but that such changes do sometimes, nay often occur, and that they have been assumed as evidences of previous inflammation, there can exist but little doubt.

The first obvious effect of the remote febrific causes, consists almost universally in a diminution of the nervous energy, and consequently of the action of the heart and arteries; as is manifested by the weak and contracted pulse, the general langour and lassitude, the diminished temperature and the sense of chil-

with the application of much force. On causing the animal to be suddenly killed by dividing the spinal marrow just below the occiput, the fluid passed rapidly out of the syringe into the artery, although but little force was applied. While the capillaries retained their full portion of vitality, they resisted the introduction of the fluid; but as soon as they had lost their sensibility in the death of the animal, they yielded like passive tubes to the fluid forced upon them by the *vis a tergo.* The application of these facts to the *post mortem* production of a red and injected state of the membranous structures, especially the more vascular ones, is easily to be understood. So long as the serous capillaries retain their vitality, they resist the entrance into them of red blood. As soon however as their vital properties cease to exist, they lose the power of resisting the intromission of red blood —becoming in fact mere passive and yielding tubes. But as the arteries continue to contract on their contents some hours after the extinction of life, they must necessarily force the blood forward into the relaxed and unresisting capillary system, into which it will therefore be driven as into a sponge, and give to the more vascular structures the red and injected state so often found on post mortem examination, where no previous inflammation whatever existed.

liness which usher in all febrile affections. These initial phenomena of fever are especially conspicuous in intermittents, remittents, and in catarrhal affections. There is nothing in the character of these symptoms which can justify the inference that they are dependent on inflammation. "Inflammation," says Dr. Armstrong, "cannot exist in the cold stage of fevers, all the phenomena of which are directly opposed to inflammation." The course and phenomena of intermitting fevers present us indeed with insurmountable objections to the "*physiological doctrine.*" The periodicity of these fevers is strongly opposed to the idea of their immediate dependence on gastro-enteritis. It is indeed true that some affections of an inflammatory character have been known to recur in a strictly periodical manner; but such cases must be viewed as anomalies, and altogether contrary to the almost universal course and character of phlegmasial diseases. An inflammation which observes a perfect periodicity in its attacks, must be *sui generis.* If intermitting fever depend on inflammation of the mucous membrane of the alimentary canal, then must this inflammation be periodical, and therefore essentially distinct from the inflammation which produces *remitting* fever; for in this malady it must be continuous. These two forms of fever are however produced by the same remote cause; and we are therefore forced to admit, by the assumption of this doctrine, that the same remote cause is capable of producing two kinds of inflammation essentially distinct from each other. The character of the remedies too which have been found most effectual in arresting intermitting fever, is directly opposed to the idea that *gastro-enteritis* constitutes its proximate cause. Who can believe that quinine, arsenic, black pepper, and other remedies of a similar character are peculiarly calculated to cure inflammation of the mucous membrane of the alimentary canal? Indeed these very articles appear to be particularly dreaded by the disciples of this doctrine, on account of their tendency to create gastro-enteric irritation, and yet all experience goes to prove that they are decidedly the most prompt and valuable means for the cure of intermitting fever.

M. Broussais' theory of the mode in which the remote causes of febrile affections produce gastro-enteritis is gratuitous, and but little calculated to satisfy the understanding. "Every irritation," he says, "which is capable of producing a perception in the brain, passes back by the nerves *to be repeated in the mucous membranes.*" Thus if a person be innoculated with small-pox virus, the irritation of the primary pustule, or of the innoculated point, is conveyed to the brain, whence it is reflected by the nerves upon the mucous membranes of the alimentary canal, in which it establishes an inflammation. This intestinal inflammation constitutes the essential cause of eruptive fever, and the eruption itself is only a metatastic disorder of the cutaneous system. The assumption then, "that every irritation which is capable of producing a perception in the brain, is reflected by this organ to be *repeated in the mucous membranes* of the alimentary canal, forms the main principle in the Broussaian doctrine of the etiology of fever. That the mucous membranes of the intestinal tube possess a very wide sphere of sympathetic relations, is a fact indeed as undeniable as it is important in a pathological point of view. But that this structure constitutes a subordinate sensorium commune, to which all morbific impressions are especially conveyed, after having been perceived by the brain, is a position which all the zeal and ingenuity of its advocates have as yet failed, and I apprehend will ever fail to place upon that firm basis which it ought to have for a foundation of our pathological faith.

I do not mean to object to the general fact, that all impressions capable of ultimately exciting fever are in the first place communicated to the sensorium commune, and thence reflected throughout the system, and sometimes upon some particular organ or structure; but this reflected impression does not, it may be justly maintained, necessarily establish a focus of irritation, or always, nor even generally, fall especially upon the intestinal mucous membrane.

If the impressions of morbific causes are always transferred to the mucous membrane of the alimentary canal, the impressions of all agents, remedial as well as others, must of course

be referred to the same structure. This, however, does not accord with the results of observations. When mercury is rubbed on the skin, the salivary glands, the gums, and the mucous membrane of the mouth receive the chief impressions excited by this agent. Will it be contended that a gastro-enteritis must be established before salivation can be produced? If opium be applied to any part of the body, the impressions are concentrated in the nervous centre. When cantharides are applied to the surface, the irritation is conveyed to the neck of the bladder, and not to the mucous membrane of the bowels, and yet fever will be the result. From these and many other similar facts that might be adduced, it is manifest that the supposed law of the animal economy, by which, as is alleged, all febrific impressions are reflected from the brain and *repeated* in the mucous membranes of the bowels, is gratuitous, or to say the least, highly improbable.

The fallacy of those doctrines which confine the primary inflammation to some one structure exclusively, is strikingly illustrated by the circumstance that different writers have fixed on *different* structures, as the parts primarily affected in fevers. Thus Clutterbuck maintains, with Broussais, that fever is always a purely symptomatic affection depending on a local inflammation pre-established by the febrific cause. He asserts that this primary inflammation is invariably located in the brain and its membranes, and adduces the phenomena discovered on post mortem examination, in testimony of the correctness of his doctrine. Broussais, on the other hand, asserts that the primary inflammation is not in the brain, but in the mucous membrane of the bowels, and appeals with equal confidence to the appearances exhibited on dissection for confirmation of *his* doctrine.

This discrepancy is in itself sufficient to show the weak foundation on which these two doctrines rest; for if the evidence afforded by autopsic inspection in relation to this subject were not extremely ambiguous, it would one may suppose, be impossible to draw from it conclusions so very discrepant, and yet so nearly equal in point of plausibility.

The advocates of the gastro-enteritic pathology of fever, place no inconsiderable reliance for support to their doctrine on, what they are pleased to assert, their superior success in the remediate management of fevers. Leeches, and an almost total abstinence from food, with cooling, acidulated, mucilaginous drinks, constitute nearly the whole of their remediate applications; and they claim for this mode of treatment, a greater success than that which they allow to others who pursue a more active course of treatment in fevers. It does not appear however that the golden age of medical success, so confidently promised by Broussais, on the introduction of his doctrine has as yet arrived;* nor do the statements which have been published in France, in reference to the comparative mortality under the Broussaian, and the other modes of treatment, give any confirmation to the claims of superior success set up for the former. We might however admit the excellence of the Broussaian mode of treating fevers, without yielding our assent to the correctness of the doctrine which alleges that the gastro-enteritis is primary where it *does* exist. There exists but little doubt in my mind, that in continued and remitting fevers, active purgation is not unfrequently carried to an injurious extent; for although we may, and, as I conceive, ought to reject the opinion that such fevers *depend* essentially on gastro-enteritis, yet it is beyond all doubt, that a very considerable degree of irritation, amounting in many instances to inflammation does often *supervene* during the progress of the disease as an *epiphenomenon*, and unconnected with the origination of the fever. In cases where such a condition of the

*In 1821, Broussais asserted, "that the tables of mortality declare in favour of the *new doctrine*, and that *its influence upon population would be more favourable than that of the introduction of vaccination.*" Unfortunately, however, this happy influence of the *nouvelle doctrine*, remains yet to be realized;* and the advocates of the doctrine may console themselves for the tardiness of this influence, with the certain prospect of not being very soon deprived of the opportunity of publishing their ordinary quantum of *post mortem* examinations.

*Refutation de la Doctrine de M. L. Doct. Broussais, Par L. Castel.

mucous membrane of the intestinal canal occurs during the course of the disease, the soothing treatment recommended by Broussais, would no doubt be much more salutary than the vigorous purgative plan so commonly pursued in this country and in England. Unquestionably intestinal irritation and inflammation perform an important part in febrile diseases. These conditions often arise as consequences of the general febrile action; and frequently, no doubt, also in consequence of harsh and repeated purgation, and the use of other irritating remediate agents. But it is equally probable that *gastro-enteritis* is often the result of the remora in the intestinal tube, of acrid and vitiated secretions, and other offensive materials, in consequence of withholding suitable laxatives, in the commencement and during the progress of the malady. Broussais has done much good, by awakening the attention of the profession to these pathological conditions; and thus added another proof of the fact, that new doctrines, though fundamentally erroneous, seldom fail to do some good, by directing the views of physicians to important circumstances which were previously overlooked or too much neglected.

In leaving this subject, I deem it right to observe, that however widely we may differ from Broussais in relation to the pathology of fever, all must admit that he has just and high claims to the respect and gratitude of the profession for the light which he has thrown on the nature, symptoms, and treatment of mucous intestinal inflammation, as well as on the physiological and morbid sympathies of the animal system.

Broussais is unquestionably one of the most enlightened and ingenious pathologists of the present day. His is now the only general doctrine which especially occupies the attention of the profession. Like all the preceding great doctrines in medicine, it is destined, perhaps, to culminate for a while in the firmament of our science, and to attract its host of worshippers; but, assuredly, sooner or later it must sink again, and add another to the long list of once highly favoured, but now exploded and neglected doctrines. That the Broussaian system contains much that is valuable, it would be unjust to deny; but to these con-

cessions in its favour, there are, unless the majority of competent judges greatly err, offsets of no small moment. In relation to this doctrine, as indeed of every one else, it behoves us to embrace the useful and reject the false; in short, to adopt the good advice of Lucretius,

> "————doctrinam acri
> Judicio perpende; et si tibi vera videtur
> Dede manus—aut si falsa est, accingere contra."

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ART. II.—*An unsuccessful case of Cynanche Trachealis, in which tracheotomy was resorted to. An extract from a letter to* E. ATLEE, M. D. from JOHN L. ATLEE, M. D. of Lancaster, Pa. Communicated by DR. ATLEE.

DEAR UNCLE,—

My son William, was taken, on the 9th of January, with the premonitary symptoms of fever, which by the next morning was fully developed, and accompanied by the usual symptoms of Cynanche Tonsillaris. He had also a hoarse cough, indicating some affection of the larynx, which we did not think of much consequence, as he had been frequently troubled with it before. The fever continued three days, when it yielded to purgatives and antimonials, so that on the 13th he was so far convalescent as to amuse himself during the day and evening in playing about the chamber. On that night however, his sleep was restless and disturbed, and he would frequently start up in bed in great alarm. About three o'clock, on the morning of the 14th, we were awaked by alarming symptoms of suffocation, which however, subsided so completely before I was sufficiently awake to observe them, that I again lay down in security. These paroxysms recurred occasionally until day break, when his mother, in great alarm awaked me, and told me that she thought William had the croup. Finding her apprehensions to be well grounded, the most active measures were adopted, and Dr. Hume and Muhlenberg, were called in to my assistance. Bleeding, emetics, calomel and blisters were freely resorted to—assisted by seneka and the hive syrup, but

although we were able to procure temporary relief from the paroxysms, they would recur at intervals of six or eight hours. He remained in this situation through the 14th and 15th, and on the night of the 15th just after midnight, a violent paroxysm came on, and before I could adopt any decided measures for his relief, he was on the point of suffocation. I sent immediately for the physicians and ran down stairs for my instruments, determined, if other means should be unsuccessful, to open the trachea. On my return he was gasping for breath in his mothers arms, just on the point of dying from suffocation. Under these trying circumstances, I cut through the integuments and completed the opening into the trachea, just as the physicians entered the room.

For a minute he lay apparently lifeless, he then opened his eyes and looked around him, at the same time breathing so softly and sweetly that I could scarcely realize that life was not extinct.

In about five minutes he had so far recovered, as to appear, with the exception of the wound, entirely well. The wound was kept patulous until an instrument could be procured to keep it permanently distended. The mucus was expelled by coughing through the artificial opening, and removed as it accumulated—he breathed softly and sweetly—his pulse and skin were natural. The larynx however remained closed, and he breathed only through the artificial opening—he was unable to make any sound and could only indicate his wants by the motion of his lips.

His physicians, with whom Dr. Carpenter was now associated, thought with me that there was a fair prospect of recovery. but on the following evening his breathing became more frequent with other febrile symptoms, followed by a paroxysm similar to that which had preceded the operation. It appeared to me as if a spasm had seized the trachea below the opening, as the whole trachea was so contracted that I could scarcely introduce a probe. I succeeded however, in doing so, opened the trachea, and immediately he expelled a firm coagulum of lymph which had formed in the trachea and bronchiæ. Temporary

relief followed, but in a few hours the paroxysms returned and continued to recur until they terminated his existence about 5 o'clock on the morning of the 17th.

So distressing were the spasms, that I almost regretted the performance of an operation which only prolonged the dear childs sufferings. But it was one of the means which had been successful in other hands, and had I omitted it I should forever have regretted it. Indeed I have always reflected upon myself for having once before neglected to operate under similar circumstances.

*Lancaster, April 11th,* 1830.

*Remarks by the Editor.*—Few persons, we think, who have witnessed the agonizing struggle for breath in the last stages of croup, will hesitate to applaud the decision and firmness of a parent under these desperate circumstances, in resorting to an operation, although with a reasonable conviction that it could afford but temporary relief.

Several cases of croup are related by Dr. Jackson, in a late number of the American Journal of the Medical & Physical Sciences, in one of which, resembling the present in many particulars, the operation was performed at his urgent request. The operation was performed by Dr. Barton, at 1 P. M. A membrane was removed by the forceps which, when unfolded, exhibited the form of the trachea, its bifurcation and several of the ramifications of the trachea. In a short time almost every symptom of the disease vanished. and the most favorable anticipations were indulged; but in the evening the febrile irritation returned; a mucopurulent discharge took place from the opening which became more viscid, and so abundant that it was difficult to keep the opening free; the breathing became more and more laborious; and the patient died at 5 A. M. on the next day.

We shall present to our readers the appearance exhibited in the post mortem examination of the trachea and larynx with the remarks of the writer.

"*Trachea and larynx.* The interior of the larynx was completely incrusted over, with membraniform exudation; it lined the internal face of the epiglottis; the external was free of it; the rima glottidis was nearly closed by it. The ventricles of Morgagni, the ligaments, &c. were no longer apparent from the thickness of the membranous layer, spread over the interior of the larynx. This layer adhered firmly to the mucous membrane, but its surface was irregular, appearing as though pieces had been detached.

"The membraniform exudation extended through the trachea, and penetrated the bronchia, below its ramification, but did not enter the smaller divisions. At the ramification, the calibre of the bronchial tube was so much diminished as merely to admit a small quill. In the trachea, the exudation was closely adherent to the mucous membrane; in the bronchia it was detached and tapered off to a point. It could be separated, in the thickest portions, into layers, appearing to have been formed by successive exudations."

"The lower portion of the trachea and bronchia contained a fluid of the consistency and possessing the colour of cream; the tonsils and the posterior fauces were covered with a copious, thick, viscid mucus, strongly resembling albumen. The fluid of the trachea, I suspect came from this source, and the alteration of its colour, proceeded from its mixture with the air. I observed before death, that every act of inspiration produced a singular rattling sound. The copious secretion from the fauces, could not be expectorated, in consequence of the opening into the trachea, which destroyed the phenomenon of coughing, and it was drawn into the trachea by the effort of inspiration. Hence the windpipe was filled with it, respiration embarrassed, and suffocation ensued from its accumulation in the trachea and bronchia, with that of the bronchial secretions, in the lungs, from the impossibility of expectorating them by the loss of the power of coughing."

These cases appear to our author to justify the following conclusions:—

"1st. That inflammation of the tonsils is a frequent precursor to croup in children; and that it ought consequently always, in them, to be attentively watched, and should be treated very actively by the means best adapted to reduce inflammation."

"2d. That the membranous exudation may commence in the lower part of the trachea and the bronchia, extending upwards, and does not invariably arise in the fauces or larynx, and proceed downwards."

"3d. That the most prompt and decisive remedy for sanguine inflammation—that is, sanguineous depletion—is the only certain remedy, and should be resorted to in the first periods of the disease, so as to precede the membranous exudation."

"4th. That the membranous exudation having been once produced to any extent, little expectation of a recovery is to be entertained. When this result does occur, it is to be regarded as fortuitous, depending on some extraordinary circumstance, and which cannot be calculated as a probable event."

"5th. That when the membranous exudation has been thrown out in the larynx, trachea, and bronchia, the application of muriatic acid to the fauces, so highly extolled by Bretonneau, and of nitrate of silver, recommended by Dr. Mackenzie, from the local and limited impression they must necessarily make, can promise no beneficial operation—their influence cannot be extended to the surfaces from which the exudation takes place. This practice can be of utility only in rare cases, where the difficulty arises from an obstruction limited to the glottis and fauces."

"6th. That laryngotomy, or bronchotomy, is a useless operation, when the membranous exudation has actually occurred, and extends, as it mostly does, to the trachea and bronchia; or, when the inflammatory irritation of the respiratory mucous membrane is not subdued, and a free secretion from it is produced. The impossibility of coughing after the operation, prevents expectoration, the fluids accumulate in the trachea bronchia, and bronchial ramifications in the lung, causing, finally, suffocation. The only case in which the operation promises

success, is an obstruction confined entirely to the glottis, without disease prevailing to any extent in the respiratory mucous membrane."

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ART. III.—*Report of a case resembling Dry Gangrene, in which amputation of the thigh was performed by* WILLIAM LINDSEY, M. D. of Richmond, Indiana.

The patient Lucinda Dunkin, about 17, emigrated from North Carolina in the early part of last fall. On her journey she was exposed to great fatigue and hardship travelling the greater part of the way on foot, wading the water courses when they were passable in this way, and "camping out" by night. On her arrival in this place she complained of general lassitude and debility, but continued to pursue her usual avocations for some weeks, when she went to Cincinnati to seek employment as a domestic servant. From this time her health gradually became worse until she was confined to her bed, and she continued in that city for three weeks without receiving any medical assistance. At the expiration of this time she again returned to this place, and on her journey, when so unwell as to be unable to sit up, she was exposed in a very inclement season of almost continual rain, very badly clothed, to sleep in the waggon four days, her clothes scarcely dry at any period of this time. She remained for some weeks, the precise time I cannot state, without any regular professional attendance, and in the mean time was put under a steam course by an empiric of the *Steam or Indian Faculty.*

As the patient was very poor and friendless and perfectly destitute of all the necessaries of life, she was "put upon the county," and my good friend Dr. Prichett of Centreville was employed to attend her.

What her disease was during the first five or six weeks of her illness, it is now impossible to determine; but it was doubtless occasioned by the long continued application of cold, and aggravated by renewed exposure. Dr. Prichett found her labour-

ing under a low typhoid fever, that continued to grow worse for two or three weeks, until she was reduced to the very borders of the grave. At length, however, a crisis apparently formed, and the patient appeared to be very slowly convalescing, but in about ten days she was seized with a severe pain in the left foot and leg extending up to the knee, which was followed in a few hours by leaden coloured spots gradually changing to a dark olive, variously interspersed from the knee to the toes. In a few days nature appeared to be drawing a line of separation at the knee joint, producing a solution of continuity followed by sphacelation and sloughing, and in about three weeks from the commencement of the pain the separation was nearly effected. In addition to the ulcer at the knee, three sinuses had been formed, upon the external, internal, and anterior part of the thigh, the two former extending nearly to the upper extremity of the os femoris.

On the 13th of January I was called in to consult on the propriety of an operation. Until within a few days, the extreme debility had forbid any hope of success from this measure, but at present, her general health was improving, and the sinuses had nearly disappeared under a course of general tonics, and the local application of the roller with the astringent and stimulating and injections.

As we considered that the patient must eventually sink under the copious and offensive discharge from the knee, amputation was determined on as a last resort, and the limb was removed by the flap operation, about seven inches above the knee.

Some time previous to the operation, a small ulcer had taken place upon the loins, which from the great weakness of the patient could receive but little attention, until the condition of the stump permitted her to change her position of recumbency, from the back to the right side. By this time the ulcer had become very formidable, measuring three inches in diameter, while a number of small sinuses opening under its margin indicated the general loss of tonicity in the neighboring parts; and when the sloughing was arrested, two of the spinous processes were so far denuded as to be visible at a considerable distance.

After changing her position, two other troublesome ulcers made their appearance, one upon the trochanter major, and the other a little above that process.

The ulcerative process which accompanied these ulcers were attended with some striking peculiarities. The first thing which arrested our attention was a slight discoloration of the surface, unaccompanied by swelling or inflammation, confined to a small point, of a dusky leaden hue similar to that of ecchymosis, gradually changing through the intermediate shades to a deep black, and gradually extending until arrested by stimulating applications; and when arrived at this state, the skin presented to the sense of touch a sensation similar to that produced by rubbing a dry buck skin cushion. In order to produce a separation of the hardened integuments, the most powerful stimulants and vesicatories were necessary, such as tinct Lyttæ, ol Terebin, &c. and after this they healed more kindly under a dressing of Ung, spermaceti covered with a poultice than with any other dressing we applied. After the operation, the health of the patient improved under the use of Sulph. quina and other tonics, with the occasional use of diffusible stimulants and anodynes to meet particular symptoms, and in three weeks the stump was perfectly healed.

By this time however, the ulcers on the loins had become so troublesome as to interfere very materially with the general health, and in a few days after the acatirzation of the stump, a general edema took place over the body, the right leg became enormously distended, and the stump ulcerated afresh. The strength however was supported with tonics stimulants, to the edematous limb were applied a roller, the tinct. of capsicum, and eventually, what served a still better purpose as a dressing, both to this the ulcerated stump, the vene. terebin. This last remedy in reducing the pain and edematous swelling had a most astonishing effect. On examination of the limb after its removal, the peritonteum generally was found dry and detached; many parts of it presented a dry, shrunken and crisped appearance; the whole foot was so divested of moisture that I was enabled without any difficulty to preserve it, with

the leg some distance above the ancle. The integuments having been removed by stimulating dressing the whole upper surface presented a fine exhibition of the more superficial vascular distribution; the blood preserving its natural colour so as beautifully to represent a fine red injection.

The knee joint was very much diseased: the head of the fibula was separated, and the head of the femoris and tibia were carious to the distance of two or three inches from the joint.

*Remarks by the Editor.*—The details of this interesting case exhibit a degree of skill and humanity on the part of the physicians who attended this unfortunate patient, that is highly creditable to the profession.

To the greater part of the world, the reward which follows acts of disinterested benevolence is so remote, that such occurrences cannot be too highly valued. We have seen a limb that had been amputated for dry gangrene by Dr. Gibson, but which differed from the case described by Dr. L. in several important particulars. The disease commenced in the foot and proceeded up the leg, as if by continuous sympathy, until it was arrested by amputation, and the amputated limb presented the appearance of a well dried preparation covered with varnished leather, without exhibiting on its surface any trace of organization. In the present case, the disease appears to have been confined to the skin and cellular membrane, and to have depended upon constitutional derangement.

Since the above was written we are informed by Dr. Lindsey that the patient has recovered her health perfectly.

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ART. IV.—*Case of Chronic Dysentery of three years duration, cured by the blue pill and a mucilaginous diet,*—by D. R. BARD, M. D. of N. Troy, Vermont.

In the month of September last, I was requested to prescribe for a young married lady who had been labouring under chronic dysentery, for three years, with but slight and partial remis-

sions in the winter months. She was much emaciated; pulse quick and feeble; countenance sallow; skin dry and harsh; tongue slightly furred; appetite very bad, great debility. There were generally from 10 to 15 dejections daily, slimy or purulent, streaked with blood, and sometimes pure blood was discharged. The abdomen was tender on pressure, with great pain and weakness in the loins, sacrum and hips, and the evacuation of the urine and fæces appeared to be prevented by a peculiar painful sensation of muscular debility distinct from the tenesmus. As the patient had been already under the care of numerous practitioners, who had tried almost every variety of treatment without success. I determined to resort to the practice recommended by Dr. Mitchell, in the Journal of the Medical & Physical Sciences for August, 1828, viz: a mucilaginous diet with the blue pill, and such occasional depletion as the symptoms might call for.

On the 3d of September, the patient was directed after evacuating the bowels by a dose of castor oil, to take nothing into the stomach but an infusion of slippery elm, and 4 grs. of the blue pill every night.

4th. The oil operated well; two evacuations since.

6th. Feels very feeble and faint; tongue clean, pulse softer, skin more pliant; has had three stools both yesterday and to day, similar in character, but with less tenesmus. Treatment continued.

9th. One stool daily since the last report, improved in appearance and without tenesmus, distress in the pelvis abated, and the tenderness of the abdomen removed.

12th. On the 10th she had a slight return of the pain and bloody discharges, occasioned probably, by drinking a cup of tea and eating a biscuit. Since that time, having confined herself to the infusion of elm, the symptoms have improved, and she has had one consistent evacuation daily.

15th. All her difficulties appear to be removed. Permitted to use a little stale bread and milk.

She continued to use the blue pill and the infusion of elm

for sometime, and gradually resumed her former diet without inconvenience, and has since enjoyed perfect health.

Although the pathology of chronic dysentery is perhaps as well settled, as that of any other disease, there are few practitioners who have not occasionally found their best concerted plans of cure frustrated.

The influence of a mucilaginous diet, by removing irritation from the debilitated digestive organs and their ulcerated surfaces, can be readily comprehended. The *modus operandi* of the blue pill is not so obvious. If, as Dr. Mitchell supposes, it is essential to the cure, does its efficacy arise from its power in correcting derangements of the digestive organs, or from its local application to the diseased surfaces? If its utility depends upon its general effects as a mercurial, could not some other preparation of mercury supply its place? These enquiries are proposed to those persons whom, a more extended acquaintance with the disease may qualify to solve them, better than can possibly be the case with the practitioner, whose practice is confined to a high northern latitude.

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ART. V.—*A case of the successful employment of the Rhus Toxicodendron in paralysis.*—By JOHN EBERLE, M. D., &c. &c.

Miss O. aged about 47, of a spare habit of body, and nervous temperament, was suddenly seized on the 17th of June, 1827, with vertigo, nausea, great debility and total loss of voluntary motion in the whole left side of her body. I saw her an hour after the commencement of the attack, and found her with a pale and anxious countenance; a small, rather tense, and quick pulse; pupils contracted; skin of the natural temperature on both sides; and remarkably loquacious, though incapable of distinct articulation. The sensibility of the affected side was not in the least degree impaired. There was not the slightest somnolency—on the contrary an almost constant wakefulness tormented the patient for many days. I prescribed, at first, an active mercurial purgative, which op-

erated very freely; frictions with strong tincture of capsicum and cupping along the spine and back of the neck. Blisters were afterwards applied to the wrist and ankle of the affected extremities. I continued this treatment with an occasional laxative about ten days, without deriving the least advantage from it. I then prescribed the saturated Tincture of the *Rhus Toxicodendron* in doses of 40 drops three times daily. On the third day after commencing with this remedy, strong involuntary starts of the muscles of the affected side occurred, and on the following day the muscles of the fingers were under the command of the will. Under the employment of this medicine, without any other remediate measures, the empire of volition gradually extended itself, until in the course of about ten days the muscles of the affected arm were fully under its command.

The muscles of the leg however, still remained inobedient to the calls of the will. The use of the tincture of *rhus* was now discontinued and frictions, mustard seed internally, and blistering along the lower part of the spine, again resorted to. At the end of eight days, the patient's condition was not in the least improved. The tincture of Rhus was therefore resumed, in doses of 45 drops thrice daily. In the course of four days from the resumption of the medicine, strong involuntary contractions of the affected limb again ensued; and in a few days more, the patient could slightly move the thigh on the hip; but over the motions of the leg, ankle and toes she had not the least command. In a very short time however, she found herself able to move the whole limb; and she is now (August 7,) capable, with a little aid, to walk in her chamber. She experiences daily a manifest increase of muscular power in the leg. The powers of the arm are completely restored.

It is somewhat singular that the return of voluntary motion in the *upper* extremity commenced in the first joints of the fingers, and was gradually extended upwards to the shoulder; whereas in the lower extremity, voluntary motion was first manifest in the power of moving the thigh on the hip, then suc-

cessively passing downwards,—the ankle and the toes remaining longest in a paralytic condition.

The Rhus Toxicodendron is by no means a novel, although at present an almost wholly neglected remedy. Dufresney, Kruger, Elz, Alderson, Horsefield, and others have adduced much evidence of its remediate powers in paralysis. Besides the case related above, I have seen another instance of its usefulness in this affection. From a letter which I received from Professor Osann of Berlin, I learn that in Germany this medicine has within the last three or four years been employed with marked success in paralytic affections.

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ART. VI.—*A description of a disease called Charbon, that prevails between the Sabine and Red Rivers, communicated in a letter to* DR. SPARKS, from JAMES Z. ELLISON, M. D. of Opelousas.

DEAR SIR,—

In my last letter I promised to give you some account of a disease prevalent in this section of country, called by the inhabitants *charbon.* Many physicians confound it with malignant carbuncle, but I am disposed to concur in the popular opinion that it arises from the bite of some insect and I am the more disposed to this belief, as Linneus has described an insect, under the name of Furia Infernalis, whose sting produces a disease very similar to the one under consideration. The marsh between these two rivers extends about 20 leagues from the Gulf of Mexico. It abounds with insects and the disease I believe is never met with more than 30 leagues from the Gulf.

The disease begins with a small pimple surrounded with an areola either red or livid, and a hardness in the cellular membrane under the integuments, with a troublesome itching, or a slight burning pain. The pimple in the centre shews a constant disposition to sphacelate, and forms a dark coloured eschar; the swelling extends and increases, and the pain becomes more acute and lancinating, and eventually is so excru-

ciating, that it frequently destroys persons of robust constitutions in five or six hours. In the mean time the constitution is involved; great debility follows, the pulse small, weak, frequent and quick; the surface is cool, but the patient is tormented with a sense of internal heat and inextinguishable thirst; the countenance is sallow and expressive of the greatest anxiety and distress. As the disease advances, the prostration increases, the pulse becomes feebler and more frequent, the tongue dry and rough. The duration of the disease varies greatly. In mild cases the patient frequently recovers. In more violent ones, life is sometimes destroyed in a very short time—sometimes the fatal termination is protracted to the 5th or 6th day, or even longer.

This disease may be communicated in various ways. Besides the bite of the insect by which it is originally produced, it may arise from inoculation, or from eating the flesh of those animals which have died with it. Dogs are frequently said to die from the latter cause. A respectable farmer in this vicinity told that about 30 of his hogs, having eaten a small portion (not more than ten pounds) of a horse that had died of this disease, died in a very short time. It is currently reported that ravens will not eat the flesh of these animals. Whether this be so, or not, I have frequently remarked that although they are sufficiently numerous in this country to destroy the carcases of dead animals in thirty hours after they are cold, yet they often permit them to moulder untouched. Persons employed in skinning charbonic animals frequently catch the disorder. A physician in this vicinity who has had very extensive experience with the disease informed me, that a Spaniard having, by way of bravado, eaten a piece of the flesh of a beef that perished of this disease, died in a very short time, and the person who skinned it, having carried the skin for some distance on his back, caught the infection through a sore on his neck, and died in consequence. Whether it is ever caused, as the milk sickness is said to be, by eating the milk of animals affected with it, I have not the means of determining. The number of cases that occur from the sting of the insect is greater than

those from infection. I have met with six cases of the former in man, and perhaps five or six times that number among the lower animals; and but one instance arising from the latter cause.

The treatment of this disease is principally local. Depleting remedies are not well borne, and stimulants are equally inadmissible, except in the last stages of the disease. All practitioners coincide in the propriety of destroying the eschar, although by different methods. Some preferring the knife, others the caustic. The latter is, I believe, in general the best practice. If the disease be large the Nitrate of silver, or the caustic potash, should be applied to the whole eschar, over this again we apply Aqua Ammonæ and a blister sufficiently large to cover the whole tumor. When the specific character of the disease is thus destroyed, the ulcer will generally heal under the common treatment. The constitutional treatment must be regulated by the stage of the disease, and the general character of the symptoms. Early in the disease before the constitution is much oppressed measures must be taken to reduce irritation and restore the secretions; keeping in view, in the use of remedial agents, the great debility that is likely to ensue. But I have already exceeded the limits prescribed to myself and must therefore leave the subject, with the hope that these hasty remarks may lead to investigation, and induce abler hands to bestow upon it, that attention which its importance calls for.

*Note by the Editor.*—As the writer of the above article has referred to a similar disease, supposed by Linneus to be produced by the Furia Infernalis, we will present to our readers the translation of an article, upon this subject, in the *Dictionaire Des Sciences Medicales.*

Furia Infernalis. The inhabitants of some parts of Sweden, and especially of Bothnia and Finland, are subject to a species of carbuncle which attacks, for the most part, the hands, the face, and other parts of the body that are left uncovered. The pain which accompanies this tumour is excruciating, and the consequences are sometimes so serious that they terminate by mortification and death. The celebrated naturalist Lin-

neus was attacked by this malady in one of his journeys. A peasant informed him, that the disease was produced by a kind of worm, which was carried by the wind upon men or animals, penetrated their flesh, and could only be expelled by the suppuration which its presence excited. He shewed him also the worm which was the cause of his disease, dried, and about four lines long. Linneus, upon this information, admitted this insect as the cause of the sufferings he had experienced, and describing it under the name of *furia infernalis*, assigned it the following characters. Body linear, equal, fili, form, ciliated on each side with a single row of reflected prickles, pressed close to the body. The naturalists of Sweden at this day agree unanimously, that Linneus misled by the violence of the pain has too hastily assented to a popular prejudice; that the malady with which he was attacked was a species of pustule analogous to the carbuncle, which appears especially in autumn in the marshy parts of Sweden; that the pretended insect to which the people attribute the cause of this tumour is nothing but the apostume of the carbuncle, and that the animal presented to Linneus, was nothing more; or perhaps was the larve of an insect, which Linneus in its state of desiccation could not detect.

The respect which the Swedes very justly entertain for the memory of this illustrious naturalist, who has done so much honor to their country, has prevented them from directly contradicting the error into which he has fallen. But their naturalists generally admit, that the researches made to discover the *furia infernalis* have proved ineffectual; that the countrymen know it by its effects, but that no one affirms that he has seen it.

It appears that the species of tumour which has given rise to this error, although it sometimes terminates by gangrene, and is perhaps under some circumstances fatal, connot be classed among tumors essentially gangrenous, such as the anthrax, the malignant pustule of Burgundy, that of the Alps described by Mr Bayle, &c. for the application of simple emollient poultices is commonly sufficient to prevent the termination by gangrene.

ART. VII.—*Cases illustrating the pathology of what are called "Cold cases" of Bilious Fever, with remarks by* JAMES C. FINLEY, M. D.

So much has been written upon the subject of bilious fever, that it is with reluctance I again appear before the publick in connection with this subject. Having published, however, an essay on the "Bilious Fever of Georgia," in a former number of this Journal, I hope that a few cases, in illustration of the pathology and treatment advanced in that essay, will not be unacceptable to our readers.

Case 1. Mrs. W. aged about 50, after a very protracted case of bilious was confined with an attack of Intermittent fever, on the 1st October, 1826. On the next day I saw her, and was informed that the chill on the preceding day had commenced about 10 in the morning, and continued about four hours. At the expiration of this time, her attendants permitted her to satisfy her urgent thirst by a copious draught of cold water, and in a short time, the cold stage terminated by a free perspiration without the intervention of any apparent reaction. I found her in a state of great debility, the powers of the circulation very much impaired, complaining of chilliness, with the surface of the body pale and contracted. The surface of the body was directed to be rubbed with Tinct. of capsicum, the carb. of ammonia was given internally, and although she stated calomel had generally operated very unkindly upon her system, I ventured to give it, in combination with pills of Rhubarb and Aloes, at intervals, so that she might take 5 grs. in the course of the day.

At 3 o'clock on the next morning, I again saw her. The fever had returned on the preceding evening, with great anxiety, restlessness and incessant efforts to vomit. The stomach was relieved by a sinapism, and by draughts of the carb. ammo., and a teaspoonful of laudanum was prescribed at eight o'clock, in anticipation of the chill. The carbonate of ammonia to be taken through the day if the symptoms should require it.

In the evening had rested comfortably during the day, without chill or fever. Directed 25 gtts. of ladanum to be taken with 1-2 oz. castor oil.

In the morning the oil had operated; patient clear of fever and gastric distress. Quinine 2 grs. every 2 hours.

In the evening, fever, gastric oppression, tenderness over the region of the stomach. Directed 1-2 oz. castor oil, and a blister to the epigastrium. In the morning the oil had operated copiously, producing very great depression. I directed an anodyne which was not taken, and in the evening I found her in a state of the most alarming debility, her evacuations passing insensibly. A full anodyne with the liberal administration of diffusible stimulants restored her from this situation. On the next morning she was free from fever, and took the sulph. of quina with a very good effect. Her health was very slowly and gradually restored.

Case 2. The writer of these remarks, in a few weeks after his convalescence from a very protracted case of fever, was exposed during the day and until late in the night, by riding in the rain on a very cold day. On the next day, (October 8, 1826), he was seized with a chill followed by fever with stupor. A dose of calomel acted as an emectic-o—cathartic, evacuating a quantity of viscid yellow bile; and on the next morning, he rode through a damp cold air, several miles to see a friend that was dangerously ill. On the 10th, the chill returned without any striking symptoms of congestion or inflammation, without pain or oppression, and continued from 9 A. M. until 2 P. M., terminating, as in the former case, without manifest reaction, by a free perspiration; and leaving the system completely prostrated.

The fourth day of his illness passed with very little fever, and on the 5th, the chill was prevented by 50 gtts. of ladanum with other diffusible stimulants. On the morning of the 6th, Dr. Childers, a physician of great observation and experience who very kindly attended him during the remainder of his illness, considered him to be out of danger and prescribed the Sul. quinœ. As his bowels had been neglected since the first day of his illness, a few grs. of rhubarb were prescribed. The

Sul. of quinine produced so distressing a state of general excitement that it was discontinued, and the rhubarb by its operation prostrated the system so much that the pulse sunk, leaving the patient with too much irritation to bear the free administration of stimulants, and with too much debility to admit of evacuants. He remained in a state of insensibility until 2 o'clock on the morning of the eighth day. In the mean time, the strength was supported by the cautious administration of the carbonate of ammonia, blisters were applied to the extremities, and contrary to the expectation of every one, the system was aroused, and the senses suddenly acquired their powers of perception. The appetite soon returned, but the mind as well as the body, long remained in a state of infantile weakness, and the feelings, amusements and trains of thought were those of childhood.

There was some reason to doubt whether the depression on the sixth day of the disease arose from the operation of the medicine, or was the consequence of the returning paroxysm of fever. The former was the more obvious cause, but the great irritability which prevailed would rather discountenance such an opinion ; and in addition, it will be observed, that it continued through two complete paroxysms of the fever.*

These two cases we think, present several important peculiarities. 1. The great length and severity of the cold stage with so entire an absence of the usual symptoms of congestion. Of my own feelings during the chill I have still a distinct recollection. There was no pain or oppression—but a slight sensation of chilliness creeping over the body, with such a torpor of the perceptive and intellectual faculties, that although perfectly sensible of the almost certain approach of death, produced none of those feelings of anxiety which arise so naturally in the mind

* Those who have read the essay to which I allude may remember, that it was stated that the bilious fever in that section of country was uniformly of the double tertian type, consisting of two paroxysms the one on the odd days, commencing in the morning and manifesting a disposition to terminate in the evening of the same day with an intermission more or less perfect; the other commencing on the afternoon of the even day and continuing through the night, frequently until within a short time of the paroxysm of the next day.

on similar occasions. The faculties of the mind, although impaired and almost prostrated, still preserved their regular and harmonious action. 2. The absence of fever shews that the hot stage of intermittent fever is not essential to the sweating stage; and that febrile action, though no doubt, a salutary effort of nature to repair the inroads made upon the animal economy, is not essential to those critical discharges by which she relieves herself. 3. Another curious circumstance is, that in this state of entire prostration of the vital powers so much irritability should have existed, as to preclude the use of the sulp. qui. —This medicine producing in one case, symptoms of gastro-enteritis, and in the other, a most distressing feeling of general excitement that seemed to pervade every fibre of the body. 4. The train of symptoms appear to point out a cause of fever very different from local inflammation, and if this did occur, it may very justly be considered as the effect of the fever, or of the too early administration of tonics. Lastly, they place in a very striking light the errors of those pathologists, who see no other cause of debility in congestive fevers but visceral engorgement; on the contrary, congestion is attended with direct as well as indirect debility, and the former, if not first in importance is at least first in the order of succession.

*Case* 3. I was called, Nov. 6th 1828, to visit A. H. a girl about 9 years of age. After a slight indisposition of two days, having taken a chill on the third day about 8 o'clock, I found her at eleven, still under its influence. She was perfectly insensible, the pulse indistinct, irregular and fluttering, and the surface of the body pale and flaccid—the blood in some places having settled in the superficial veins so as to give the surface a purplish hue; the respiration somewhat hurried and laborious. Bottles filled with warm water were applied to the extremities and axillæ; 10 gtt. of the "black drop" were administered; the carbonate of ammonia and infusion of serpentaria were assiduously given every hour, and sinapisms of a large size were applied over the stomach and to the extremities, which were suffered to remain until some degree of permanent inflammation was produced. The action of the sina-

pisms produced some degree of excitement, and about 2 o'clock, symptoms indicative of approaching convulsions occurred which we supposed would terminate her existence, but contrary to our expectations, they proved the harbinger of a favorable change. In a short time a general glow appeared on the surface, the pulse became fuller and more distinct, followed, in the course of the afternoon, by a slight diffused perspiration; and with a pleasure superior to any I ever experienced except from a similar source, I saw the unfavorable symptoms successively vanish.

On the next morning, no fever. Sulp. quina, Dovers Powder and calomel were given during the morning. In the afternoon, castor oil, which operated producing serous evacuations only. Slight return of fever in the afternoon and through the night.

On the next day, the 5th of her illness, calomel 10 grs. and Dovers Powder 5 grs. were given, followed by castor oil when the fever rose, which operated favorably. On the next morning the gums were very slightly affected; perfectly free from fever —Sulp. Quina repeated—no return of fever.

*Case* 4. Nov. 12th 1828. On calling at the house of Mr. F. where I was attending on several patients ill of the fever, I met at the gate a negro boy for whom I had prescribed on the day before. Observing that he was very unwell, I directed him to lie down, and on coming in to prescribe for him, about an hour after, found him in a state of profound stupor, the pulse small, irregular, and too quick to be counted, the extremities cold, and the surface of the body rather warm, but dry, harsh and inelastic, the tongue covered with a secretion of white mucus—he was evidently in the stage of depression which precedes the fever. After a time the heat came to be generally diffused over the body, and was somewhat increased above the natural temperature. During the chill, the bowels were evacuated by stimulating enemata, and after the fever rose, very large sinapisms were applied over the stomach, to the extremities, and to the nape of the neck, and suffered to remain until some degree of permanent inflammation was produced, without producing any symptoms of returning sensibility

—indeed he was perfectly insensible to their action. Such was the prostration of the system that we were afraid to prescribe any thing of a debilitating nature. As the fever subsided, we gave him carb. of ammo. and infusion of serpentaria. At 9 o'clock P. M. the fever had so far subsided, that the skin was nearly of a natural temperature ; and on the next morning, the coma with the other unpleasant symptoms was relieved, but the debility was still very great. Calomel 15 grs. Dovers Powder 10 grs. divided into two powders, were taken in the course of the morning, followed by Ol. Ricini in the afternoon.

Slight fever on the preceding afternoon. The medicine had operated favorably ; all the symptoms much improved. Quinine, 3 grs. to be taken in the course of the morning. There was a slight return of fever for a few days, but the patient recovered his former health very rapidly.

It is in cases similar in character to those above described, that the plan of Dr. Daniel is peculiarly applicable. The rapid march of the disease does not afford time for slower vesicatories. Sinapisms produce their effect more speedily, may be applied to a much greater extent of surface, probably exert a greater influence over the heart and arteries, and are far less distressing to the patient. It will be observed that these unfavorable symptoms frequently depend upon temporary congestion, are very sudden in their accession, and when most alarming, frequently give way at the termination of the paroxysm. It is therefore an object of considerable importance to have the surface free for the application of the same remedial agent, upon the accession of another paroxysm.

*Case* 5. Nov. 15, 1823. In the absence of the family physician, (Dr. Rodgers,) I was called to visit a son of Mr. S. aged 11. He had had a chill in the morning followed by fever, which had nearly subsided when I saw him in the evening. This case exhibited no particular indications calculated to excite alarm—his skin was dry and husky but nearly of the natural temperature—the pulse not more hurried than is usual in the febrile diseases of children of that age—his respiration perfectly easy. If any symptom would have occasioned anxiety to

the experienced physician, it would perhaps have been, the listlessness and perfect indifference which he manifested towards every thing around him. I gave him an emetic which operated imperfectly. On the next morning the family physician, without any suspicion of danger, prescribed a dose of calomel to be followed by some other cathartic, which was represented to have operated favorably.

On the 3d day of his illness he was surprised to find him at 10 A. M. with a chill, his extremities cold, his pulse sunk, and his countenance pale and ghastly. External warmth was applied, and an active course of stimulation adopted, consisting of the liberal administration of carb. of ammo. and the tinct. Opii.

Being requested to stay with him during the night, I saw him about 9 o'clock. The surface of the body was cold, except in the vicinity of the important viscera, where it was burning hot—the circulation in the extremities had ceased, while the action of the heart, as indicated by the pulsation of the carotids, was exceedingly rapid and violent. The administration of stimulants, as was to be expected, increased the action of the carotids without diffusing the excitement over the system—the respiration became more laborious, and at ten he expired.

*Case* 6. The daughter of Major R. aged 5 years, was taken with a chill, on the 12th of Nov. 1827. At the time I was staying at the house of her father, labouring under the sequelæ of bilious fever to a most distressing degree. After the chill, she lay very quietly, disposed to sleep, and complaining so little, that no serious apprehensions were excited. The fever returned on the next day about 12 o'clock, with some very alarming symptoms. The drowsiness was increased, the pulse small, quick and irregular, the tongue covered with a dark fur, and the general appearance of the patient appeared to indicate that the disease was about to assume an insidious congestive character. There was indistinct remission of the fever in the evening, with an improvement of many of the most unfavorable symptoms. A mercurial purgative, followed by repeated doses

of castor oil, was given during the day, which operated very imperfectly.

On the next morning, (the 3d of her illness) at six o'clock, the chill returned with convulsions. Sinapisms and external heat were applied to the extremities, and in about two hours the chill terminated by a general diffusion of heat over the surface ; but the circulation on the surface was not restored, the skin retaining its pale and purple hue, the pulse in the radial artery was small and irregular—in the carotids excessively violent, great heat over the thorax and abdomen, with considerable fulness in the region of the liver. Active purgatives were again prescribed, which produced copious serous evacuations, slightly tinged with bile, with great irritation and distress. The fever remitted in the evening, without perspiration, and without relief of the coma. An anodyne enema was administered, and a blister applied over the hypochondriac and epigastric region.

On the next morning, the 4th of her illness, the patient tolerably clear of fever, stupor remaining. The fever returned again at 12 with an aggravation of the symptoms of congestion and oppression, a remission took place in the evening, followed by an exacerbation, at two o'clock on the morning of the 5th day, under which the patient sunk and died about 9 o'clock.

A very important difference will be remarked in the two last cases, and the preceding ones. It has always been a very serious source of regret to me that the prostration both of body and mind arising from the previous attack of fever, rendered me unable to give to the last patient that attention which the urgency of the symptoms demanded. At the time we were unacquainted with the great efficacy of external irritants in cases of this kind.—Perhaps in the last case, the lancet might have been useful, local bleeding would no doubt have been of service. Dr. Hamilton of Natches, informs me that in these prostrate cases of fever, he has found great advantage from a resort to the lancet, wherever the action of the heart and carotid arteries has been excessive.

*Case* 7. July 4 1828. I was called to see a negro boy 14 years of age, on the 3d day of his illness. He had been taken ill from home, and on the day before had been carried 30 miles in a gig. The stage of depression, indicated only by the coldness of the extremities and the weakness of his pulse, came on at 9 o'clock and in about an hour terminated in fever, with a general diffusion of heat. The pulse weak, irregular, rather full, from 110–120, respiration laborious, profound coma. The feet were immersed in hot water, and a vein opened in the arm, but when six ounces of blood had been drawn, the pulse began to sink the limbs became relaxed and a copious perspiration broke out from the forehead—the skin elsewhere remaining hot and dry as before. Calomel 15 grs. Tart of Antimony 1 gr. divided into 3 powders, one every 2 hours. As soon as leeches could be procured 30 were applied to the chest and epigastrium, and within half an hour after their application the patient was sufficiently relieved to ask for water. During the afternoon the operation of his medicine producing copious serous evacuations, was checked by an anodyne enema. In the course of the evening the fever subsided, the heat remaining in the thoracic and abdominal regions much longer than elsewhere, and in the mean time the pulse became fuller and more distinct. After the fever subsided a blister was applied to the epigastrium.

6th. Blister has drawn well. Calomel 15 grs. Dovers Powder 8 grs. to be taken in the morning, followed by an active cathartic in the afternoon.

7th. Clear from fever. Medicine operated well, bringing away copious tar-like evacuations. Quinine 12 grs. in the course of the morning. Slight return of fever for a few days, which yielded to mild cathartics.

This last was certainly a well marked case of congestive fever, the more deserving of notice, as it was accompanied with a general diffusion of heat over the surface of the body. It has been too much the practice of medical writers, to apply the term *congestive* to those cases of fever only, in which general reaction on the surface does not take place. This we think is an error. Although the action of the arterial and capillary

system are very intimately connected, yet the latter is so far independent of the former, that reaction may take place on the surface, while the heart is oppressed with a load under which it can scarcely pulsate. Under the influence of this error, many writers have denied that increased heat is an invariable symptom of fever. Increased heat is so intimately associated with all *our* notions of fever, that we look upon it, almost, as the "morbus ipse." Diseases which prove to be febrile when permitted to run their course, may prostrate the system so suddenly, that fever is not developed. In the loose phraseology of popular conversation, it may be sufficient to say that "the patient died of malignant fever;" but popular error should not be permitted to conceal the important fact, that the *precursors of fever* constitute, in this case, the fatal disease.

One remark further on the operation of purgatives in this variety of fever, we deem it important to make. That is, their tendency to produce copious serous evacuations from the bowels, which debilitate the patient, without mitigating the violence of the disease. It is very necessary to attend to this in practice, and if on the one hand, we avoid drastic cathartics from a fear of increasing the debility, it is, on the other, equally important to avoid the other extreme of resorting to the saline medicines. Calomel guarded by opium, followed by mild but efficient purges, will secure all that is to be expected from this class of medicines, with less debility, than would result from any other course.

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ART. VIII.—*History of two Cases of Burn, producing serious constitutional irritation.* By DANIEL DRAKE, M. D.

The readers of the Western Journal will recollect, that in the Autumn of 1828, its publication was suspended, in consequence of a burn which the Editor received on both hands in extricating one of his female relatives from the flames. The object of this paper is to report such facts connected with that casualty, as may be interesting to the profession.

*Case* 1. A young lady, aged 20 years, in feeble health, was extensively burned, by her musquitoe curtains and calico bed cover being set on fire, after she had fallen asleep. The flames enveloped her head, neck and arms, and were not extinguished for 20 or 30 seconds. Ardent spirits were first applied, then flaxseed oil, and, lastly, a calcarious soap of the same oil and lime water. Laudanum was administered freely, both externally and internally.

The pain and smarting were intense. Great coldness soon came on, with a weak pulse, and epigastric anxiety. Her mental faculties continued unimpaired. In a short time her respiration became irregular, and stertorous. Coma supervened, and about 8 hours after the accident she expired. No reaction took place, and she died from the shock which her nervous system suffered. As her face was surrounded by the flames, and her mouth burnt, it is not improbable they were drawn into the fauces, even as far as the glottis.

*Case* 2. The Editor, in rescuing the patient, whose case has just been related, was severely burnt in both hands. It happened by compressing the burning clothes in his naked hands, until the flames were extinguished. The cuticle exfoliated from nearly the whole of the right hand, and the cutis vera sloughed in seven places, of which the deepest was the ball of the middle finger. The left hand suffered much worse. The whole cuticle was separated, and much of it was rolled up, especially that which covered the space between the wrist and hollow of the hand, extending up the inner side of the thumb, as far as the middle of the second phalanx. Between these limits, and the metacarpal bone of the little finger on one side, and the corresponding bone of the thumb on the other, the true skin, was killed and turned black. The back of the wrist and hand suffered almost in an equal degree, and the ball of the forefinger was still more deeply injured.

Immediately after the accident he immersed both hands in whiskey, then in a liniment of flax seed oil and lime water, after which the affected parts were wrapped in rags dipped in a painter's mixture of the same kind of oil and white lead,

ground together. In three days this was replaced by carrot poultices with yeast and peruvian bark; the deeply burnt, parts being stimulated at different times with tincture of myrrh, oil of turpentine, ammoniated alcohol, and other excitants. Elm bark poultices were then used, and subsequently the cerate of lapis calaminaris, and yellow resinous ointment. After a few days, suppuration was established and the dead skin sloughed off. In the ordinary time granulations arose, and at the end of six weeks an imperfect cicatrization had taken place. Thus the cure of the burnt parts, considering their depth and extent, was effected in good time, by the usual means, and had the case presented nothing but what has been stated, a report of it would have been of little interest.

There resulted, however, from this local injury a great constitutional disturbance. And to this I beg leave to direct the attention of the reader.

The temperament of the patient was the bilious slightly modified by the lymphatic. Of course so grave an accident was more likely to be followed by a state of nervous, than vascular irritation; and this, in its most distressing form, actually supervened. Several causes seem to have conspired to depress the energy and disorder the sensibilities of his nervous system.

1. The acute sensibility of the parts injured, resulting as in the case of medical men generally, from the use of the hands in a great variety of delicate manipulations. In consequence of this state of exalted sensibility, the pain, for several hours after the accident, was excruciating, notwithstanding the liberal use of laudanum.

2. The scene of concentrated horror, under which the injury was inflicted, contributed not a little to overthrow the powers of the nervous system.

3. The immersion of both hands, extensively denuded of cuticle, in a liniment of oil and white lead, seems to me to have contributed largely to the same effect. The direct influence of the preparations of lead on the nerves of the part to which they are applied, and through them, upon the system at

large, is unquestionable. To this power we may refer the effects which flow from solutions and liniments of the acetate of lead in external inflammations, which are well known to diminish the energy of the nervous function of the part, and, consequently, to subdue the inflammation more effectually than cold or evaporating washes of simple water.

At a time, and in a country where the paste of white lead ground in oil, is a fashionable application to burns, I feel disposed to exhort those who may employ it, to be cautious as to the extent of surface over which it may be spread, and the length of time it may be left on the injured skin.

In the case now under consideration, not only an augmented nervous irritation was the consequence of such an application; but likewise *a real saturnine colic*—consisting in obstinate constipation, retraction of the umbilicus, borborigmi and acute abdominal pain, which came on about four days after the white lead was applied. On mentioning this fact to a medical friend, he informed me, that 18 months previously, he saw a case of burn treated with the same application, and the patient during his convalescence was afflicted with severe colics, to which, neither before nor since, had he been in any degree liable, and for which there was no other obvious cause than the white lead.

4. Two, three or four days after the accident, when febrile symptoms were developed, the patient, by his own advice lost about 10 ounces of blood. This was done under the apprehension that the fever and inflammation might run too high, for healthy suppuration, but it manifestly did harm.

It would be difficult to set forth the variety of physical and moral sufferings, which were attendant on the protracted state of nervous or constitutional irritation which these causes generated.

Much of the time the pulse was not marked by any *great* peculiarity, being near the healthy standard in frequency, though below it in force and fullness, but occasionally it was frequent and feeble. The secretory functions, generally, were deeply smitten and carried on most imperfectly. That of the kidneys was much diminished, and for several days a true

ischuria existed, so that the moderate quantity of urine secreted was retained in the bladder until that organ was stimulated into action by medicinal agents. Of these, the application of heat and moisture to the hypogastric region, emollient enemata, the tinctura muriatis ferri and a mucilage of elm-bark (Ulmus Americana. Cortex) were the most successful.* The secretion of bile was suspended in a still higher degree, and could not be restored by mercurials even in large doses. Nothing but a nourishing and savoury diet, at the end of several weeks effected this object. In this there was not any thing which ought to be considered remarkable ; for food is in fact the natural stimulus of the liver, and I have more than once seen it effect the restoration of the biliary secretion after other means had failed. When patients not of a sanguine temperament, are subjected to a very rigid abstinence, the secretion of bile is apt to fail, and the suspension is too often regarded as a cause instead of an effect, a fact which I have known to be overlooked to the detriment of the patient.

The appetite was not greatly impaired but fastidious, and the contents of the stomach were sometimes thrown up. The bowels were torpid and much contracted. The secretions of the mucous membrane were evidently reduced in quantity, and the powers of evacuation diminished. For some time the rectum was almost paralytic, and so insensible, that enemata of the most stimulating kind were scarcely felt by the patient. Ten or twelve days after the accident, a hæmorrhoidal tumor formed at the extremity of the bowels, and was endowed with the intense morbid sensibility. The patient had been liable to such attacks for many years, and it is worthy of remark, that until

*I take this opportunity to inform the profession, that Mr. Christopher Carey, an inhabitant of the Miami country, has invented a method of pulverizing this bark, so that it readily dissolves in boiling water—forming either an elegant mucilage for internal nse, or a most soothing and useful cataplasm. For these purposes it is now kept in the principal druggists' shops of this city, and is worthy of a place on the shelves of every physician and surgeon. It should be kept in close vessels, as some kind of insect deposits its eggs in the powder when exposed, and small hairy larvæ are hatched out.

13 months after his recovery he did not experience the slightest return of that malady, and then it was reproduced by an aloetic pill.

The cutaneous functions were equally impaired with the chylopoietic. The skin became and remained pale and bloodless, perspiration was nearly checked, and the power of generating heat greatly reduced.

These morbid states of the secretory organs, were sufficiently indicative of an overthrow of the functions of that system, which presides over their various operations ; but the feelings of the patient were still more significant of nervous depression and perversion. A sense of muscular debility and a consciousness of mental imbecility, extreme restlessness, and morbid vigilance, were the utterable sensations which can be recollected. None of the ordinary stimuli of life, either moral or physical, produced their characteristic effects, the system being insensible to their presence, or the effects which they produced being different from those which they excite in health. In short every sensation both of mind and body, was unpleasant if not painful ; and this continued to be the case for at least five weeks.

For several years the patient had been subject, with but little interruption, to daily paroxysms, chiefly in the afternoon, of cerebral oppression accompanied with drowsiness, suffusion of the face, and a sense of sinking and vacuity *in epigastrio*. These symptoms had come on both before and after venesection, and would fairly have been regarded by Dr. M'Cullough, as an example of chronic and relapsing intermittent. With this previous tendency to a diurnal paroxysm, the constitutional irritation which I have just described, was soon observed to coincide, and for a number of days, the patient had an afternoon exacerbation, which might have passed for a fit of what is denominated congestive intermittent fever :—The temperature, force of the circulation, and activity of the nervous system, being so reduced, as, apparently, to threaten dissolution. The hour at which this paroxysm recurred was observed to vary for some time, becoming later and later as frequently happens with intermittents.

It deserves to be mentioned, that the process of granulation in the burnt parts advanced in a favourable and healthy manner in the midst of this extreme constitutional irritation.

It is, also, worthy of being stated, that for a twelve month or more after the accident, the cerebral affection was nearly suspended, but has since that time been gradually returning, though it is much less severe than before the burn.

For the cure of this disorder, a great variety of means were employed with but small effect. An emetic which so often revives and regulates the sensibilities of the system, afforded but little relief. Tonics, embracing the sulphate of quina in large doses, were beneficial, but their powers were inadequate to a cure. During the afternoon paroxysms, when the temperature and vital forces were greatly reduced, external and internal stimulation of the most energetic kind was employed, and seemed *immediately* necessary to the preservation of life. Sulphuric ether and ammoniated alcohol were serviceable ; but opium and the preparations of morphia, were found most efficacious ; and could not be dispensed with every evening for more than thirty five. I cannot too strongly recommend the sulphate or acetate of morphia to all who labor under constitutional irritation, with painful local affections. When it cannot remove the latter, it possesses the power of *reconciling* the patient to them, an important *desideratum.* Piperine was taken for two days, but its effects were much less, than those of morphia. The patient made an observation, however, which for its physiological importance deserves to be recorded. After taking the medicine for 24 hours in the form of pills, he could taste it in his saliva, or at least had constantly present in his mouth a piperine or peppery taste, not referable to any contact of the medicine with that part. Exercise in the open air, was of course regarded as more likely to prove efficacious than any other means ; and, accordingly, the patient was carried abroad even before he was able to sit erect. "An airing" was found, however, to do but little good. His senses were unsusceptible to external impressions, and when surrounded by the objects

and scenes which in health impart pleasure both to the body and mind, he could elicit from them no gratification to either He recognized their presence, but felt not their animating influence, although it was anxiously desired. Still, however, on principle, it was clear, that exercise ought to break the spell which bound his physical system, and it finally did. Being placed on board a steam boat, destined for Louisville, the incessent gestatory motion, in a few hours, began to revive the pleasurable feelings of health, and he was enabled to pass the night of the voyage, without an opiate—the first for more than a month. He slept but little, yet he escaped the usual paroxysm of restlessness and prostration. The next day he was enabled to endure a carriage ride ; the following day to relish it ; and on the third to *enjoy* the return voyage with disenthralled sensibilities. From that time forward, his recovery was regular and rapid. Though a brief evening paroxysm of nervous irritation occasionally required a diffusible stimulus.

I have been the more prolix in these details, because those states of chronic nervous irritation which no medicine can cure, are not uncommon ; may spring from various causes, afflict persons of both sexes and of different ages ; subject the unfortunate patient to the derision of his acquaintances, and too often bring upon his constitution the desolating tortures of officious medication. I have seen many persons in this sad and pitiless state of physical and moral imbecility, and can bear testimony to the great uncertainty of medical prescriptions for their relief ; indeed I have often known them augment the very irritation they were expected to subdue ; and am compelled to believe, that many of the nervous diseases which are so often prolonged through an indefinite period, are kept up by our *polypharmacia antispasmodica.*

In these cases, so distressing to the patient and so perplexing to the physician, the best resource is exercise in the open air, with an abandonment of all active and irritating medicines. In many instances the plan will be of difficult execution, for the patient will be alarmed at the very suggestion of exercise ; but it soon recommends itself by its beneficial effects, and if

no organ is permanently deranged in structure, it will, by perseverance, work out a cure.

Returning from this digression, it remains for me to speak of the state of the burnt parts at and since the time of their cicatrization.

For several weeks the new cuticle, of the inner part of the left hand, was in a constant state of exfoliation and reproduction. At first it was separated by a thin stratum of serous fluid, and would come off in large coriaceous flakes, the operation being attended with considerable itching and soreness; but gradually the process of effusion ceased, and the scales became branny, in which form they continued to fall for more than a year. Their reproduction, indeed has not yet entirely ceased.

As the period of cicatrization approached, the granulations became affected with a distressing *neuralgia*, which was violent, for six or eight months, and has not yet, at the end of nearly two years entirely ceased. It would be difficult to characterize the different kinds of pain which the patient endured for the first half of this period. Sometimes it was dull and aching, but oftener acute and suddenly radiated from a point through the whole eschar. At other times, it resembled the sensation produced in the extremities of a nerve, by pressure or a blow on its trunk; again it was a sense of formication, and then of urtication; but more commonly the patient could only compare it with the imaginary effect of millions of fine, red hot needles, running in all directions through the new flesh. Its onset was frequently as sudden, and almost as transient, as an electric shock; suggesting to the mind of the patient, that it might be owing to the imperfect conducting power of the new nerves. Throughout the whole period, the parts were liable, at times, to a sense of violent spasmodic contraction, and in this condition, if pressed upon, felt almost as hard as cartilage. Several circumstances were observed to exert an influence on this affection.

1. When the patient was dyspeptic or otherwise indisposed, it was apt to be more violent.

2. When the parts were long exposed to the cold, it was made worse. Their calefacient power was, and remains greatly reduced. This is more remarkable in the middle finger of the right hand, than any other part. The ball only of the finger, was burnt ; but under a moderate exposure to cold, the whole finger, quite up to the hand, looses its heat so rapidly, as to place it in contrast with the others. In this condition its extremity is generally neuralgic.

3. When the hands hung down, the neuralgia was suddenly and insupportably aggravated. For several months it appeared to the patient, upon letting his left hand fall by his side, that its continuance in that position would excite general convulsions—such were his feelings on the subject. If, however, he held a weight, or grasped any solid body, the distress was less poignant.

4. For many months, a kind of neuralgic flash or explosion, was the invariable consequence of a deep inspiration, whether made in sneezing, coughing, sighing, or as an experiment. Struck with this effect, the patient verified it by innumerable observations, and was not long in discovering (what seemed to render the fact still more curious) that the shock produced by a second deep inspiration, was much less, than that attendant on the first ; and that upon continuing to respire, in that manner, a third or fourth time, the neuralgia would cease to be reproduced. After a few minutes, however, it could be re-excited by the same means, with its characteristic violence. I state the fact without attempting its explanation.

5. The effect of pressure on this neuralgia was highly beneficial, but the relief ceased with the compression. It was surprizing to the patient, to observe how much compression the recent granulations and eschar could sustain, without any unpleasant sensation—but the reverse. For months he was under the necessity of devising new modes of applying pressure, as the situation of the parts affected rendered every contrivance imperfect in its operation, and he was often obliged to seize and powerfully compress the principal eschar with the other hand so as to relieve the neuralgia when it became insuppora-

ble. For several weeks after cicatrization had commenced, he could not sleep at night, without placing the left hand under his pillow, in such a manner that the weight of his head would rest upon the eschar.

A great variety of applications were advised and employed for this formidable affection, but with little good. Of pressure I have just spoken. Its effects were but palliative. Covering the parts with varnished silk, so as to confine the perspiration, and exclude the air, was beneficial, and for more than a year it was found necessary to keep them protected with soft leather. The effusion of cold water over the parts affected was grateful, and often relieved the neuralgia, especially, when it was of an acrid and burning character, but its effects were transient. The tincture of opium, extract of belladonna and other narcotics afforded but little relief. Emollient poultices increased the irritation. Alcohol did good, and a solution of the nitrate of silver was found serviceable; but like every other application, the relief it afforded was inconsiderable. Time only has been efficacious; but even the lapse of nearly two years, has not entirely overcome the affection.

With respect to the specific sensibility of the new parts, something should be said. When they are passed over hard surfaces, the sensation excited in them is rather acute and sometimes painful, but in no degree specific or intelligible; and hence the burnt fingers cannot be associated with the others in any operation that requires delicacy of touch. For a year or more, they could not feel the impulse of a soft and blunt body, such as the stroke of the artery at the wrist, though the patient could perceive, without the aid of his sight, that the affected finger was applied to the skin with the rest. But to the impress and the abstraction of heat, the new parts have always been morbidly sensible—suffering from both, much sooner than the corresponding sound parts. In this respect, indeed, the injured fingers bear to the uninjured, a relation similar to that which the *differential* thermometer of Leslie bears to the *mercurial* thermometer of Fahrenheit. The de-

veloping and resisting power of the new flesh, for caloric are, in fact, both reduced, while their sensibility to that agent is increased.

Cincinnati June, 1830.

SUPPLEMENT. As a supplement to the foregoing paper, we publish the following extract from Mr. Travers' valuable work on constitutional irritation under the impression that it is not in the hands of our readers generally.

"*Treatment of burns.*—Burns and scalds are unattended with hemorrhage. No species of injury exhibits the symptoms of prostration in a more marked degree than these, when of a severe description. The remedy upon which I rely in burns inducing this state, is brandy in gruel, in the proportion of one part of the former to two of the latter. This is administered in doses of a table-spoonful or two at short intervals, until we obtain a sufficient distinctness and fulness of the pulse at the wrist, with a corresponding improvement of complexion and temperature of the surface. The bowels should be simply kept unloaded by means of castor oil or common injections. If there be much stupor, and the bowels have been previously costive, I prefer to give ten or fifteen grains of the compound calomel and scammony powder. The use of opium, a remedy still generally employed on account of the patient's sufferings, I have abandoned, being convinced by experience, that in small doses it is inefficacious, and in large ones injurious. I have before observed, that pain is a good symptom in burns. I need scarcely observe that the exhibition of the stimulus requires unceasing and judicious attention ; it must be intermitted, if the pulse become bounding, and the patient flush. Nevertheless in deep and very extensive burns of adult subjects, I have frequently found it necessary to persevere in its use for a week or ten days at lengthening intervals ; occasionally intermitting, and always gradually withdrawing it. Not only has the partial remission of this plan been in some instances imperative, when re-action was permanently established, but symptoms of the head or chest have made their appearance which required blood-letting, either topical or general ; and a smart purge of calomel and scammony I have found on such occasions very useful. In deep burns the external remedy which I prefer is the turpentine and olive-oil liniment, or turpentine and cetaceous ointment, upon the principle, though not exactly the plan, recommended by Dr. Kentish of Newcastle, and subject, after suppuration commences, to such changes as the state of the surface may require. This appears to me to coincide advantageously with the internal use of the stimulant. The lime-water and milk liniment, and when suppuration has become abundant, the calamine or chalk powder lightly strewed over the whole surface, and defended by the

same or simple ointment thinly spread on linen, is the local treatment which I adopt in superficial burns.

Upon the whole, the results of the stimulant treatment of burns, which I have more strictly pursued since my attention has been directed to the subject of this Essay, have proved highly satisfactory."

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ART. IX.—*A sketch of the life and character of* JOHN ARMSTRONG, M. D.

Dr. John Armstrong, one of the most zealous and illustrious cultivators of medical science—a popular teacher, an admired writer, and a successful practitioner, died on the 12th December 1829, a martyr to his professional and scientific pursuits.

Believing that some account of a man, whose writings are so extensively circulated in this country, will not be unacceptable to the public, we have selected from the Med. Chirurgical Review, the facts upon which the observations are founded, that we shall now take the liberty of presenting to our readers.

The original education of Dr. Armstrong, both medical and classical, was very limited. His natural abilities and his great industry and observation, however, soon abundantly supplied this defect, and his writings evince a very intimate acquaintance with the principles of his profession, and with subjects of more general interest. Indeed in the pursuit of a profession where knowledge can be of little use, until personal observation has directed its practical application, the want of professional learning was of comparatively little consequence to a mind like his, fitted by nature with peculiar talents for the investigation of disease.

His "Practical Illustrations of Typhus Fever," the work in which he published the principles and practice upon which his fame principally rests, was published in 1816. Two years afterward, encouraged by the favorable impression he had made upon the profession, he removed to London, and shortly after, a vacancy having occurred in the London Fever Hospital, he became a candidate for the appointment of physician to that institution. The canvass having commenced, he offered himself to the College

of Physicians for examination, and a license. For some reasons, which have never been explained, he was rejected—the crisis of his fate was at hand, and the irretrievable ruin of his professional prospects must have appeared to be the inevitable result. But public feeling reacted strongly in his favor, and the event which threatened to blast his prospects was the means of accelerating his elevation. Not only was he elected physician to the institution, with a full knowledge of his rejection by the board of censors, but a great many practitioners interfered in his behalf, and materially promoted his introduction into practice. Great as Dr. Armstrong's talents certainly were, assisted also by his most interesting manners, his social virtues, and by the most consummate tact and worldly wisdom, his unexampled success in his professional pursuits, can only be explained by the strong interest excited in his behalf, in consequence of this unjust decision.

Not satisfied with having secured a very extensive and lucrative practice, he directed his attention to delivering a course of lectures, in which he proved eminently successful. His high reputation, his animated and eloquent manner, his plausible opinions and ingenious disquisitions, illustrated and defended by the results of his extensive and accurate observation, together with the practice of elucidating his lectures by numerous drawings and preparations, soon procured him a larger class of students than that of any other physician, in London.

The publication of Dr. Armstrong's Lectures is said not to have enhanced his reputation, among those members of the profession who were best qualified to judge of their merit. The cultivation of the branches of science subsidiary to medicine has so far extended the field of study, that no person however great his genius, and extensive his acquirements, can expect to maintain in a course of lectures, the reputation he may have acquired by concentrating his labours upon a single subject. Retailing, as he must to a very considerable extent, the observations, opinions and practice of others, he loses the interest of originality, and the confidence arising from personal observation.

His lectures however served to extend his reputation and practice. The proverbial facility with which the minds of youth adopt the views of their instructors, applies with peculiar force to students of Medicine. The principles of the profession, depending not upon obvious and familiar facts, but upon observations, intricate, complicated and indefinite, afford to the ingenious professor an opportunity of imposing his peculiar views to an unlimited extent. And further, the student dependent upon his preceptor's assistance in every stage of his progress, very generally becomes attached to his person and overrates his talents.

Dr. Armstrong never exhibited the marks of a sound constitution. He was always delicate, and frequently affected with a cough, which he attributed to a catarrhal affection, but which, in all probability, arose from an hereditary predisposition to consumption. From the great number and hardness of the tubercles which were found in his lungs after death, they probably had existed from childhood. That they should have been excited into such fatal activity at so late a period of his life, can be accounted for, only by the great labor which he imposed upon himself. An extensive practice, to which he paid assiduous attention—lecturing in a confined and unhealthy situation during the whole year, and frequently several times in the same day—the inhalation of putrid effluvia during the examination of morbid parts, together with the great excitement into which he worked himself in every lecture, were more than sufficient to break down a constitution in which lurked already the seeds of a fatal disease. During the last 18 months of his life, his disease in the estimation of his friends began to assume a very formidable character. In the course of the last summer, he was obliged to desist from lecturing, and retire into the country for change of air. After travelling a few weeks, he returned to London, apparently much improved in health, and in his own estimation quite well. In September he went to the north of England, his native country, and returned to the city in October much worse.

That incredulity which is characteristic of pulmonary affections, retained possession of the mind of this intelligent physician, to the last stage of his disease. He would never admit that there was any serious disease of his lungs, and even so late as Novr. authorized his friends to contradict such a report on his own special authority. He continued to ride out in his carriage until within 10 or 14 days of his death, which took place on Saturday the 12th December, in the 46th year of his age.

The emaciation was so great that no person could recognize the countenance of the living in the dead body. On examination an immense excavation was found in the left lung, with tubercles and adhesions on the same side. The right lung also was studded with tubercles, some of them very hard, others beginning to soften down.

Few physicians, during their life time, have enjoyed the satisfaction of seeing their works so widely circulated, and their reputation so durably established. In his first and greatest work, the essay on Typhus, he has divided fever into three varieties, the simple, congestive and inflammatory—in the first of which, general reaction follows the stage of depression—the second, in which the circulation is so much impaired, during the cold stage, or the vital functions are so much oppressed by visceral congestion, that reaction cannot take place—the last, in which the fever is accompanied by inflammation, either produced by external causes anterior to or simultaneous with the general excitement; or arising during the course of the disease, from high vascular excitement acting upon organs, exposed to casual irritation, or suffering from the derangements of the circulation which have taken place during the cold stage. In his subsequent works, he has attempted to extend these principles of pathology to a variety of febrile diseases. Believing them to be correct, we have no disposition to compare them with the views of the French Pathologist, nor to dispute with the latter the exclusive merit of prescribing remedies upon rational principles. Convinced, however, that post mortem examinations can only shew the condition of diseased organs at the moment of death, we deny the right to infer from morbid

anatomy the origin of fever ; and with a firm belief that these views are sustained by the order in which the symptoms succeed each other, we confidently expect that time will confirm the interpretation, which pathologists have hitherto almost uniformly given to the phenomena of fever.

But it would be doing injustice to the memory of Dr. Armstrong, to rest any portion of his reputation upon his speculative opinions. Indeed he has himself rather avoided them, treating them cursorily when they came in his way, rather as questions of curiosity than of practical importance. His descriptions of disease, clear, comprehensive and concise, indicate a mind capable of the most extended views in science, with a talent for the most minute and faithful investigation, and will be read with interest, when the disputes which now divide the medical world shall be forgotten.

The practice which he recommended was energetic and decided, perhaps to an extreme, combined, however, with that accurate investigation of symptoms, and that strict attention to subsidary remedies, which must certainly have made him a safe and successful practitioner. The similarity of many of his theoretical and practical views with those of the late Dr. Rush, cannot have escaped the observation of any person familiar with the works of the latter ; although the views of Rush, necessarily indefinite from his imperfect knowledge of the pathology of congestion, are often still further obscured by his peculiar, and often unintelligible speculations.

It is now, we believe, generally admitted, that the typhus fever of this country seldom calls for the decided practice recommended by Armstrong. Dr. Rush found that the yellow fever changed its character so much in succeeding years, that he was compelled to modify very materially the practice which he found so successful in 1793 ; and it is generally believed that this illustrious man lost his life, by attempting to apply the same practice to the typhoid epidemic, which prevailed so extensively in the United States a few years ago.

In private life, Dr. Armstrong is represented as extremely interesting—an eloquent companion, a generous rival, a warm

and sincere friend. Very few would be inclined to suspect from the tenor of his writings, that he was much inclined to speculation or hypothesis ; yet in conversation and in his lectures, he is said to have embarked in discussions of this nature, with great zeal, and to have brought to the support of his views, a body of facts and illustrations which he used with much facility and address. The activity and ardor of his mind, however, disposed him to the observation and hasty generalization of facts, rather than to the profound investigation requisite for constructing a durable system. From this trait of character he was liable to fluctuate in his views; and under these circumstances, his candor led him to renounce his opinions as hastily as he had before adopted them. In his original essay on typhus, he made the fact of its arising from contagion a criterion of the disease. Subsequently he renounced this opinion, and considered typhus as a fever of malaria, disposed to assume the continued form, in consequence of the tendency to local inflammation. It is not so generally known that in after life, his practice became cautious and even timid, and that cold drawn castor oil was made to supply the place of calomel and the lancet. Perhaps this change may, in some degree, be attributed to the different rank which his patients occupied, in the later years of his life, they being probably drawn from the two extremes of society, and consequently requiring a more cautious treatment; but whatever may have been the cause, a prejudice thereby, was raised against him, which rendered him averse to similar discussions. The fact may afford a striking lesson to the intolerant partisans of speculative opinions, and a still more useful caution to those who, from their success, are disposed to decry the practice of those who prescribe upon different principles.

In reviewing his career, we are disposed to regret that, by extending his labours so far beyond the limits of prudence, he should have deprived the world of his services, just at the period when they were becoming most valuable. It may be urged, by those who estimate a man's usefulness by the result of his individual labours, that by attempting less he might have

effected more ; that by directing his exertions to a more definite object, he might more effectually have advanced the interests of humanity, and have lived long, an ornament to his profession and a benefit to society. But when we reflect how few are willing to follow his example, and how many are unwilling to exert that labour and study which are necessary to qualify them for the emergencies of ordinary practice, our regrets may be diminished. The different branches of medicine are so intimately connected, that the accomplished physician must be familiar with the principles of them all. The temple of Medical fame has, by the united labours of numerous individuals, been raised to such an elevation, that he who would climb to the summit, must be urged to unceasing exertion by every motive that can actuate the human mind. As an individual extends his reputation, his influence and utility increase in a geometrical ratio ; and although the personal labours of Dr. Armstrong, have been terminated by death, he will live long to the profession, and especially to those who were within the reach of his personal influence, in his recorded labors, and the recollection of his bright example. J. C. F.

## REVIEWS AND BIBLIOGRAPICAL NOTICES.

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ART. X.—*An Essay on the remittent and intermittent diseases, including, generically Marsh Fever and Neuralgia. Comprising, under the former, various anomalies, obscurities, and consequences, and, under a new systematic view of the latter, treating of Tic Douloureux, Sciatica, Headach, Ophthalmia, Toothach, Palsy, and many other modes and consequences of this generic disease.* By JOHN MACCULLOCH, M. D., F. R. S., ETC. ETC. Physician in ordinary to his Royal Highness Prince Leopold of Saxe Cobourg.—pp. 474.

Our last number contains an extended analytical review of Dr. M'Cullough's Essay on the production and propagation of Malaria. We propose in the present, to analyze his treatise on the diseases produced, or supposed to be produced, by this occult cause. These, according to our author, are neither few nor feeble, as will appear from the following systematic catalogue; which, although, placed at the end of his book, we choose to prefix to our review, that the reader may have a full understanding of what Dr. M. proposes to establish.

### TABULAR VIEW.

*Of the Diseases appertaining to Marsh Fever and Neuralgia.*

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MARSH FEVER.

CONTINUOUS }
REMITTENT }
- Ephemera }
- Synocha }
- Synochus }

SINGLE OR TERMINATING
CHRONIC OR RELAPSING
ANOMALOUS AND SIMULATING : *vide* Intermittent.

INTERMITTENT

- QUOTIDIAN
  - ——— Double
- TERTIAN
  - ——— Double
- QUARTAN
  - ——— Double
  - ——— Triple
- QUINTAN, &c.

SINGLE OR TERMINATING

CHRONIC OR RELAPSING

ANOMALOUS AND SIMULATING. With local symptoms often more conspicuous than febrile ones ; and chiefly so when chronic. Often deceptive in these cases, or mistaken for original or separate diseases.

| Terms from *Authorities.* | | PARALYTIC. |
|---|---|---|
| Carotica | ..... | Apoplexy—primary : repeated |
| Soporosa | ..... | Lethargy ——— periodical |
| Comatosa | ..... | Coma ——— periodical |
| | ..... | Universal palsy—permanent |
| Hemiplegica | ..... | Hemiplegia } permanent : periodical |
| | ..... | Paraplegia } permanent : periodical |
| | ..... | Local palsies } permanent : periodical |

SPASMODIC.

| | | |
|---|---|---|
| Epileptica | ..... | Epilepsy } irregular : periodical |
| | ..... | Convulsions } irregular : periodical |
| Cataleptica | ..... | Catalepsy : periodical |
| Hysterica | ..... | Hysteria : irregular : periodical |
| Pertussis | ..... | Spasmodic cough : periodical |
| Asthmatica | ..... | Asthma, Dyspnœa : periodical |
| Stranguriosa | ..... | Irritability of bladder and strangury : periodical Palpitation of heart |

NERVOUS MISCELLANEOUS.

| | | |
|---|---|---|
| Amens. Amentia quartana | .. | Mania } permanent : periodical |
| | | Fatuity } permanent : periodical |
| Hypochondriaca | .. | Hypochondriasis, permanent : periodical |
| | | Vertigo, periodical : transitory |
| Cephalalgica | ..... | Headachs, irregular : periodical |
| | | Dyspepsia, irregular : periodical |
| | | Deafness, periodical |
| | | Amaurosis, periodical : durable |
| | | Nervous disorders : undefinable |
| | | Chlorosis |

Morbus Pannonicus — Debility
Atrophy

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Emetica ..... Vomiting, periodical, chronic : acute, irregular
Diarrhœa : periodical : permanent
Menorrhagia, Amenorrhea, Dysmenorrhea
Diabetes

INFLAMMATORY.

Pleuritica ..... Pleurisy, permanent : periodical
..... Hepatitis
..... Rheumatism

Arthritica ..... general, local, acute, chronic } permanent: periodical
of joints
of intercostal muscles: false plu'sy

Nephralgica ..... Nephralgia
Catarrh : permanent acute : periodical, chronic
Ischiatica ..... Sciatica, periodical; permanent. Neuralgia
Phthisis
Hectic, false
Urticata ..... unknown to me, and not intelligible, or doubtful.

DYSENTERY,
Acute
Chronic.

CHOLERA,
Indian Cholera ; if different,
Common Cholera.

## SUPPLEMENT.

## *ENDEMICS SAID TO BE PRODUCED BY MALARIA.*

(MONFALCON AND OTHERS.)

Scurvy
Pellagra
Bronchocele
Ulcers
Rickets
Cretinage
Hernia
Varix
Elephantiasis
Asthma
Angina
Œdema of the lungs
Visceral obstructions : and dropsy, as consequences
Scrofula
Phthisis

## NEURALGIA.

*Intermittent febrile Symptoms marked, obscure, or undiscoverable, or possibly not existing.*

PAINFUL.

OF ASSIGNABLE NERVES. Pain acute: periodical or irregular.

Spinal Marrow. As yet little known or observed.
Nerves of face. Tic douloureux, in any part of the head as well as of the face.
Optic nerve.
—— of teeth. Toothach without caries.
* Sciatic nerve. Sciatica.
Anterior crural, in various parts, with various Neuralgiæ.
Spermatic nerve.
Radial. In various parts, with various Neuralgiæ.
—— Of fingers.
—— Of toes.
&c. &c. &c. Blanks to be filled: records not yet found.

OF UNASSIGNABLE NERVES Pain commonly less acute, or dull, or none: periodical or irregular: very acute however in some cases.

* Headach
Common, confined to parts, or general.
Intermitting.
Hemicrania.
Clavus.
Wandering or unfixed toothach, or face-ach.
* Palpitation of heart. No pain.
Palpitation of aorta. No pain.
Palpitation of cœliac artery ?
Stomach pains ?
Colic ——— ?
* Kidney and ureter. Decided Neuralgia: nephralgic pains.
Bladder and neck. Irritability: strangury; no pain.
Rectum.
Testicle. Acute pain.
Palus.
Cauda equina. Lumbago.
Dr. Alderson ..... Mamma. Acute pain.
Knee. Pain various
Shin bone. Anterior tibial ? considerable pain.

INFLAMMATORY, with neuralgic pains of assignable or unassignable nerves : acute or dull : irregular or periodical.

* LOCAL RHEUMATISM OF LIMBS.
in muscles.
in joints.

RHEUMATISM OF HEAD.
in face. Rheumatic (inflammatory) headach.
in jaw. Rheumatic toothach.

OPHTHALMIA. Fixed or intermitting.
Acute.
—— suppurating.
—— Inflammation of Iris.
Chronic.
Transferable.

FROM INJURY. With inflammation, or not.
from wounds or punctures of nerves : any where.
—— from blood-letting.
—— from amputation.
from blows : any where.
from ulcers : any where.
—— from caries of teeth : carious toothach.
from tumours, aneurisms, &c.
from corns.

NEURALGIC AFFECTIONS OF GLANDS. Irregular, or periodical.
* Diabetes : periodical.
Lacrymation : general : occasional, or periodical.
———— Of one eye : false fistula. Periodical : irregular.
* Salivation.
* Diarrhœa. Uncertain : periodical :
———— tertian :
———— quotidian.
Semi catarrh. Irregular : periodical.

CONSEQUENCES OF NEURALGIA : during, or subsequent to the painful state.

GENERAL,
* Mania. Irregular : periodical.
———— tertian :
———— quotidian.
* Fatuity. Permanent : periodical.
———— tertian.
* Hemiplegia.
* Nervous diseases. Undefinable in variety and number.

PARTIAL. Local paralytic affections.
numbness : any where.
tingling : sensibility : facility of being affected by pressure,
* Amaurosis. Permanent : periodical.
Contraction of Iris. Permanent : periodical.
Opacity of cornea.
Cataract ?
Caries of teeth ?
Gum boils and abscesses. Irregular : periodical.

N. B. As in the first division of this table, it is supposed that there are blanks yet to be filled in the whole. It cannot be given as a perfect enumeration ; being founded solely on the author's own narrow experience.

The affections marked with * have been unavoidably also enumerated under intermittent, since they occur in both ; or else the exact character of the disease is, under the present separation, unassignable.

When a man of acknowledged talents, after extensive research, and deep reflection, arrives at the conclusion, that this appalling *catalogus morborum*, are the offspring of Malaria ; and calls upon the profession to scrutinize his researches, it is undeniable, that they are bound, by considerations of professional duty, to give the subject a full and fair investigation. Dr. M'Cullough regards himself, and with some justice, as having travelled over untrodden ground ; and, therefore, invites his brethren to observe and reason for themselves. To no portion of them is this call more appropriately made, than to the readers of this Journal ; scattered, as they are, over inhabited parts of the vast region, which extends from the Alleghany to the Chippewan mountains, and from the marshy sources of the Mississippi, to the *bayous* and *lagunes* of its delta, at the Gulf of Mexico. The general inclination of this immense plain, is to the south ; its surface is every where covered with a rank vegetation, annually reproduced to undergo a rapid decay ; the heat of its sun in summer, is almost tropical ; its showers are frequent, and most of its waters, both running and stagnant, are widely bordered with alluvion : Therefore, if the earth *can* send forth exhalations unfriendly to the human constitution, we may expect to meet them, in what is denominated

the great valley of the Mississippi. And that it does, in reality give out something noxious, seems established by the single fact, that in situations where moisture, intense heat, a fertile soil, and accumulated vegetable remains, are combined, the inhabitants are more unhealthy, than where either of them is absent. Assuming, then, the fact, that the good people of the west and south breathe an atmosphere tainted with an invisible, and intangible gas, we are constrained to urge upon our brethren a diligent study of its origin and effects. Let it not be supposed, however, that we charge upon our portion of the United States, an exclusive generation of Malaria. Other sections are, equally, prolific in that particular; and the remarks just made are as applicable to the banks of the Potomac and Delaware, as to the Ohio and Missouri.

The first chapter of Dr. M's book treats of the ordinary remittent, or marsh fever. All who believe in the existence of Malaria, regard this disease as one of its most obvious, as it constitutes one of its most formidable effects. Our author, therefore, places it at the head of the great class of diseases originating in Malaria.

"It is, says he, the most important link of the philosophical chain, and, further, it is connected with others as their apparent cause: or, that disordered state of the body which commences as remittent, may terminate in almost any other modification of the diseases of Malaria; probably in all."

On the frequency of this fever, in some of its modifications, Dr. M. speaks as follows:

"All therefore which I can here permit myself to say is, that I have attempted to prove that all the fevers of any moment which are not produced by contagion are the effects of Malaria, very often, perhaps very generally, in our own country overlooked; and that while these two leading classes constitute the great mass of fevers throughout the world, those which arise from the other causes here alluded to, are proportionally very small in number, and of very little moment as diseases, from their trifling power on the body."

When remittent fever has been once excited, however, by its only original cause, it may recur even at distant periods from habit, or the action of other causes.

In the following paragraphs, Dr. M. discusses the question of the comparative liability of native and strangers.

"To pass to other matters, it is a question of some importance what are the comparative effects of Malaria in this case, on the natives and on strangers, or visiters ; and it is one of some little intricacy, or on which at least there are many contradictions, real or apparent. Such as these are, they will be generally solved by distinguishing between what, for want of better terms, may be called the chronic and the acute action of Malaria.

What the diseases arising from this poison are, and what their effects on the natives and inhabitants of unhealthy districts, have been detailed in the preceding essay. In this place I must add, that, setting aside what may be called the chronic effects, and the disorders exclusive of fever and dysentery chiefly, it is not the fate of the inhabitants to suffer acutely from the latter in every season ; while it is plain that if this were the case, extermination must be the speedy consequence. The more usual cause is, that after one, or perhaps more, severe fevers, this disease becomes chronic and intermittent ; persisting uniformly in some cases, and, in others, ceasing during certain periods, whether annual or of longer duration, to be again renewed in a similar manner : a few becoming freed from it after a certain number of years, and at a period of life seldom under fifty, while a greater number carry it to that grave, of which the time ranges for them between thirty-five and fifty, if they have escaped as far as the former period. Such is the nature, and quality, or extent, of this acquired habit of resistance by the natives of an unhealthy district ; or, in vulgar language, the "seasoning," which is also acquired by emigrants, if in a much inferior proportion : though I have stated a definite and perfect case, from which very many must necessarily vary, but with which they can be compared.

Thus such seasoned persons, or natives, escape many of the acute fevers which seize on emigrants and visiters ; but in seasons of peculiar epidemics, they also suffer similarly ; their powers of resistance extending only, as it would seem, to a certain point : and hence the mortalities so often recorded, which mark peculiar years, involving all in a common destruction. These considerations, varied according to climates, countries, or circumstances generally, which it would be tedious to detail, will explain the chief facts here concerned : while among minuter particulars which it would be endless to examine, it must be remarked that in certain climates, intermittent, or a chronic state of fever with facility of recurrence being more rare than in others, such a fever, once undergone, may be the pledge of a long continued security."

We have observed, at Cincinnati, that emigrants are not more liable to remittent fever, than the natives or those who had resided in the city for years. Whether the same thing is true

of other Western towns we are not able to say. The great epidemic of Louisville, in 1822, affected many of the native citizens, in common with those who had recently arrived. It does not appear, however, that the native and acclimated inhabitants of New Orleans, are as liable as new comers and travellers.

Dr. M. proceeds to inquire into the time, at which the disease appears after exposure to Malaria, and presents us with the following observations :

"If my own frequent observations show that fever may be induced within half an hour after exposure to Malaria, and that a single inspiration, or the space of a very few seconds, is amply sufficient for the purpose, this is also an opinion most decidedly stated by many French and Italian physicians whose experience and acuteness will not be questioned. It is equally the opinion of other observers, not physicians, and therefore without the bias which might be suspected in such cases : of military, and chiefly of naval men, whose observations have been founded on the momentary and transitory effects of a breeze of wind, and especially of a land wind blowing off to sea. In France and in Italy, to confirm this, instances are known and recorded, of labourers dying instantaneously from merely sitting or lying down on the ground, and of others who from looking into a ditch or drain, have been struck dead by that poison which, of course in a minor degree, would have merely produced a fever. Lind, also, whose authority stands high, describes the instant seizure with nausea and delirium, as many others have done ; so that respecting this part of the question there needs be no dispute."

These remarks are followed by others relative to the greatest length of time that the poison may lie dormant in the system, or the febrile developements be postponed, after Malaria has impressed its action on the body.

"The more difficult point to determine is, to how long an interval after its application the action of this poison can be delayed : and here, to quote Lind again, this limit is extended by him as far as twelve days. As I have had occasion to say elsewhere, it is not believed by any one of whom I know, that Malaria can, like the matters of contagion, be attached to a substance of any nature, and thus conveyed to excite its diseases ; and the observations necessary to determine this interval are not therefore entangled ; while it is plain that, to make them truly, the patients must, after a momentary or brief exposure, be completely removed from all the original causes. It may be questioned whether this has often been carefully done or

recollected ; while it is certain that from a very frequent or general neglect of the obscurer spots or causes producing Malaria, such persons may often have been unwarily exposed to them, thus easily leading to unfounded opinions on this subject. And as many of the recorded ones have been derived from facts occurring where armies remained on a given spot of ground, though the individual was not a second time exposed to the more obvious cause, it is evident that fallacy is easily introduced into the observation : particularly when what has been formerly said on the propagation, as well as the production of this poison, is considered.

Whatever the truth may be in this case, the present doubts are not expressed without as ample an examination of evidence as it has been in my power to make, and that examination consisting in attempts to ascertain at what most distant period remitting fever has appeared in ships after leaving the shore and thus getting out of the influence of the land winds. At first sight indeed, the opinion in question would appear to be confirmed by many of the cases which I have obtained from the log-books of ships of war, of which I shall however name but one, as it will be sufficient for the purpose. In this instance, a remittent appeared among the crew when on the coast of Africa ; when the vessel put to sea on a cruize, notwithstanding which, however, other men became sick in succession during the space of twenty days, after which no further cases occurred."

Our author has his doubts, whether the cases of remittent and intermittent fever, which are said, by writers, to have occurred several months after exposure, were not owing to a new application of the cause. The subject is evidently one of difficulty ; but we incline to the opinion which he impugns. We have met with cases of vernal intermittent, the disease having been epidemic the preceding autumn, in persons not then affected, as early as the month of March, when the heat, as we presumed, had not yet been sufficient, to develope Malaria ; and we recollect a case of this disease in a lady, who had the fall before travelled through a malarious district and escaped the disease, while several of her fellow travellers suffered under it. Some of them had relapses about the same time with her original attack. The city, at the time, was so free from this form of fever as to favor the belief that these patients were not taken down from any new action of the poison.

Our author proceeds to treat of the symptoms and terminations of remittent fever. We shall pass over the former in silence. On the latter we may remark, substituting our own

observations for his, that we have observed four principal modes of termination:

First—In health, by a crisis or a series of evanishing paroxysms, at the end of a variable period.

Secondly—In intermittent fever, especially that modification which is denominated ague.

Thirdly—In a train of symptoms, to which the epithet typhus mitior, is not inapplicable.

Fourth—In a congestion, subacute inflammation, or neuralgia of a joint or some internal organ.

Of the causes which determine these different modes, we are not prepared to speak. They are sometimes connected with temperament or idiosyncracy; but oftener with the Malaria itself, with the general condition of the atmosphere, or with previous, epidemic, constitutional tendencies, the offspring of undiscovered causes. Thus we have in one year known the first termination to prevail, in another the second, and in another the third. The fourth we have never known general; but it has occurred, sporadically, with each of the others, and would, therefore, seem to depend on the constitution of the patient.

In the conclusion of this chapter our author has many judicious and interesting remarks on the diminution of the powers of intellect, apoplexy, palsy and neuralgia, as casualties occurring in the progress of the fever, or as modes of termination, the whole of which we recommend to the perusal of the reader.

Chapter II. is on the chronic, or relapsing and obscure, or anomalous remittent.

Dr. M. believes that many cases of what are termed by the nosologists, typhus mitior and synochus, and by the people 'nervous fever,' 'low fever,' 'slow fever,' 'fever on the spirits,' and so forth, are in reality the products of Malaria, and mere modifications of remittent fever. Still, he thinks, there *is* a contagious fever, distinct from that caused by Malaria; and intimates that all fevers are perhaps referable to the two great causes, Malaria and Contagion. The reader will recollect

that the late illustrious and lamented Dr. Armstrong, after assuming, throughout his work on typhus, the contagious origin of that disease, became convinced that it was, in fact, the offspring of Malaria, and published a recantation. Dr. M. however, with all his propensities to extend the dominion of this element of our ætiology, seems still to believe in the existence of contagion. Were we to depend on our own observations, only, we should say, that a contagious fever (not eruptive) does not exist—never yet having seen an example of it ; but on the other hand, having known autumnal fever to appear with most of the symptoms of mild typhus, when, of course, it was mainly produced by Malaria. We decline, however, the expression of a final opinion, on this difficult subject. Dr. M. suggests, as a diagnostic rule, that when a fever, with typhus symptoms, has a tendency to relapse, is curable by the means employed for the cure of remittent fever, and is attended with glandular, visceral affections, it should be considered, as originating from Malaria rather than Contagion.

But we must give our readers, in Dr. M's own words, a more circumstantial account of this obscure and relapsing remittent.

It will now be necessary to describe, as far as can be done, the symptoms of this fever, and most particularly when those are most slight ; since these are the very cases where erroneous observation is most common, and is followed by equally erroneous practice.

This disorder may be found, and not unfrequently, with scarcely any marked symptom except mere muscular weakness ; a debility on any attempt at exertion, which seems unaccountable, inasmuch as it occurs in persons, even in youth, and apparently strong, and is not very obviously accompanied by any proper febrile symptoms. At times, not even the appetite seems affected ; and here, almost necessarily, the result is, to suspect the state of the patient's mind, or his moral dispositions, rather than his health ; to suppose, for example, as I have often seen, that a soldier is "shamming," that an opulent female is indolent or affected, or a studious or professional man hypochondriacal.

Yet, let an acute physician watch this disease, and he will be convinced that it is a disease, and moreover a fever. It commences and terminates like the remittent when best marked ; and when it appears to be prolonged for months or years, as is sometimes the case, it will be easy to see that it has had intervals of cure, generally of

self-cure, and relapse ; and that, to each relapse, there is a period of weeks, not very uncommonly of six, while the intervals vary from one or two to any given number. Further, either the patient or the physician, or both, must be very inattentive if they do not discover that the paroxysm of extreme debility is fixed ; that it is, in fact, a paroxysm, let its length be what it may, and that there is a diurnal period when it diminishes, or where the patient, who, possibly, could not stand, on getting up in the morning, is enabled to exert, and even to enjoy himself at night.

Hence, as to some cases, at least, the truth of, as well as the reason for, a very common remark, that midnight is the nervous patient's holiday ; though there are unquestionably many cases of nervous affection, and even of periodical returns and intermissions in this complicated class of disorders, which do not appertain to a remittent type of fever, or perhaps to any fever. The particular case here quoted, is one, of course, where the paroxysm attacks in the morning and the remission is at night ; but while the periods are necessarily various, so are the results, as to the complaints, appearances, or sufferings of the patient. I shall presently trace some others of the more marked of these modifications.

I have assumed here that pure debility may be the sole symptom of a remittent ; but it would have been more correct to say the sole obvious one, since it is rare but that the patient at least, if an attentive observer and a good reasoner, and if at the same time free from the morbid influences of the imagination, will not discover other indications of a febrile remittent disease ; however the physician may overlook them, from neglect, or perhaps from ignorance, or system ; or, as may also happen, from want of sufficient opportunities for personal observation. He moreover who would discover what he cannot see, by cross-examination, must know well what questions to put and how to present them ; or he may remain ignorant, from assuming a wrong course, or else gain the very answers which he has suggested. A leading question is too often as deceptive in physic as in legal procedure.

The obscure symptoms which I am now to point out are those, as might be anticipated, which, whenever they become marked, are also easily discovered ; and which, as they gradually multiply, and become also more conspicuous, indicate a more severe disease, gradually passing into a form so distinct, that the character of true remittent fever can no longer be denied to it, even by the most prejudiced. And these gradations of severity, if I omitted to adduce them just now as an additional argument in proof of the true nature of this disease, are, in reality, among the strongest evidences of its argued origin and cause ; since it would not be difficult for any attentive physician in tolerably extensive practice, to collect a series of his own cases, rising in exact gradation from the simplest debility to the most perfect and defined remittent fever.

I noticed that the appetite was sometimes not affected ; but, even in the slightest cases, a careful observation will show that it is par-

tial and irregular, or, in common language, capricious. The fact in this case is, that it vanishes during the paroxysms, returning in the interval ; a term which I choose in preference to intermission ; while the common inaccuracy of observation as to this fact, or a diversity of judgment as to the condition of the appetite, arises from a coincidence, or the want of it, between the conditions of the fever and the usually established hours of eating. He whose paroxysm includes the hour of breakfast, may be unable to eat in the morning, while he can dine ; whereas a paroxysm extending till night, may make him suppose that his appetite has entirely vanished ; when, did he attempt to dine, or sup, at midnight, or at some period of the night, should that be the interval of health or abatement, he would cease to make this complaint. And thus it is also, that we meet with cases where the appetite seems unaltered amid considerable disorder ; because, in these, the paroxysm returns at night, and the days form the intervals. Hence a rule in the cure to be noticed hereafter, which relates to the hours of eating ; and, as will also be then shown, on similar grounds, which equally refers to those of sleep.

It is barely possible that in these slight cases, the condition of the tongue may be healthy, or nearly so, and that the *primæ viæ* may also be in a state of regular action. More commonly, both are affected in modes too familiar to require further explanation : but these, as belonging to so many other disorders, are seldom of any value as diagnostic symptoms ; not seldom also misleading a bad observer, and being considered the cause of disease, of which they are merely the consequences. In the whole catalogue of ordinary practical errors, I know few indeed more common than that which views a sluggish state of the bowels as a primary disease, sometimes also a consequence of theoretic disorders of the liver, instead of considering it what it really often is, the produce of a febrile state, belonging, either to this fever or to some other initiative and similar cause. Nor is it difficult to account for this error, vulgar as it is common ; since it is the consequence, partly, of seeing, in a disorder, nothing but obvious symptoms, and partly of that empirical practice for which England is so celebrated, and which, while it tends to blind the judgment, can, from it facility, be conducted by any one : while I need not tell the medical reader to whom we are indebted for its present influence and abuses ; an influence and abuses which, whether they are now increasing or diminishing, are convenient to indolence, by superseding the necessity of thought or investigation, and by reducing the whole practice of physic to an empiricism, to which I know not that its entire history can produce a parallel example.

I feel no hesitation in saying that fevers of this character are a very general cause of the chronic and common derangements in question ; and have no doubt that there are many physicians who are aware of this, and that many more will come to the same conclusion when they shall re-examine the disorders of this character under the present views. And consequently, that while these are

symptoms of fever, not primary affections and causes of a febrile state, as is the common error under the system which I have been censuring, they may appear to constitute the sole disease, if the other symptoms are slight ; just as mere debility does in other cases : ready therefore to mislead, even an attentive physician, and much more certainly the cause of false judgments in those of a reverse character. In this fever, however, as is to be expected, such derangements become, in certain cases, more marked ; or, as the disease at large approaches to the more perfectly defined or more severe remittent, there occur all those circumstances which, as belonging to acknowledged fever, I need not dwell on.

What perhaps may appear most remarkable, is the state of the pulse ; and it is the symptom, above all others, which misleads unobservant practitioners. There are persons who cannot conceive a fever without an accelerated pulse : whereas, even in severe cases of remittent, the pulse often gives no indications of any disorder, or the very reverse of what such practitioners would have anticipated. At the very most, the periods during which the pulse is affected are sometimes so very transitory, that it is a chance if the physician should be present at the time ; while it is an observation seldom required from patients themselves, though, in such cases, perhaps improperly neglected. Thus it will happen, that in point of velocity, or of character in every way, the pulse may be natural during the far greater portion of the day, while for a period of an hour, or even far less, it may undergo that very peculiar change, consisting in asperity, or hardness, or diminution of size, or feebleness added to acceleration, generally, but not invariably, and sometimes indeed quite the reverse, which marks the commencement of the paroxysm, or the whole properly febrile state ; and which is all that we ever find of what may be called the cold stage, or of the hot one ; since these are, commonly, scarcely distinguishable in this fever, and since the former in particular can scarcely be said to exist at all in many cases. And if this state takes place in the night, as does, and not unfrequently, happen, in spite of the well-known remark that the majority of quotidian attacks of fever occur in the day, it may be as unobserved, or even denied, by the patient, as it is unknown to the physician. It is not therefore wonderful, should it happen, that, finding no proper or obvious febrile symptoms, hearing of nervous fever and nervous disease, and witnessing perhaps only nervous symptoms, dyspeptic ones, derangements of the bowels, debility, one, or more, or all, the practitioner who is influenced by a wrong system, or is without any views at all and is merely guided by terms, should conceive himself in possession of a "nervous" patient : acting accordingly, or doing nothing right, with perhaps a good deal that is wrong.

Here also I must remind the reader, that even in well-marked remittent fever, there is often a period of the day in which the pulse becomes slow, frequently falling below sixty ; while it is not unfrequently also full, as if under coma, and while this state is further

attended by actual sleepiness approaching to coma, and not seldom, if this is not present, by lowness of spirits or melancholy. The same occurs in the slighter disease under notice, and in different degrees; while being also what is called a nervous symptom, it tends still further to mislead the negligent or ignorant practitioner; him who is guided by a correlative comparison of names and receipts, terms of diseases and the antagonist terms of medicines.

This may be thought a long extract, but we could not set forth our author's views in a shorter one. Even this, presents them but partially, for in several of the following pages he continues the subject, and treats of the morbid states of the feelings, passions, and intellectual functions, attendant on this obscure form of malarious disease. These are irascibility, peevishness, anger, fear, despair, transitory delirium, hypochondriasis, and even mental aleniation. In this brief catalogue the reader will recognize those affections of our spiritual part, which constitute the moral phenomena of dyspepsia; and, indeed, much of what is contained in the chapter, now under review, might with equal propriety be introduced into a monographic treatise on that malady. Thus, our author goes on to speak at large of lethargy, morbid vigilance, and disturbed and oppressive sleep, all of which are well known to accompany what is called dyspepsia, and to constitute some of its most distressing symptoms. The disinclination to early rising, from which no dyspeptic ever was or ever will be exempt, is looked upon by Dr. M. with a different eye, from that of most writers. He bears to the opinion that the patient should be indulged. He does not regard early rising as remedial, or even preventive. *He* is the early riser whom a sound constitution has destined for long life: it is not *because* he has risen early that he sees the borders of fourscore. To this opinion we subscribe an unqualified assent. Very few dyspeptics are inclined to sleep in the early part of the night, and we have not known one who did not feel wretched on awaking, especially if aroused early in the morning. The habit of late sleeping, which governs dyspeptics, is the consequence, not the cause of their disease. But to return. Dr. M. insists, that in numerous cases of what is called dyspepsia, an observing physician may

find abundant evidence of the presence and actual workings of an obscure, chronic and relapsing remittent. If this be the fact, are we not furnished, with a key to the study of this protean disorder, in these western states? We have long thought the generally acknowledged causes of dyspepsia in the West, insufficient to account for its prevalence; and have believed and taught, that marsh miasma is one of its sources. We have not, however, pursued the subject in the manner, nor to the extent, of Dr. M. Nevertheless, we have observed, that dyspepsia is more prevalent in our alluvial villages, than elsewhere; is frequently attended with febrile movements; and, like a chronic malarious fever, will leave the patient, and recur upon him, without provocation, in the midst of his enjoyments. A malady of such habitudes, seems to have strong claims to admission among the diseases from Malaria; and we, respectfully, commend the whole subject to the profession in the West and South, as one deserving of great attention.

Passing from dyspepsia, our indefatigable author goes on to speak of hysteria, as one of the modes in which remittent fever occasionally disguises itself; after which he observes:

"Thus I have enumerated the leading and conspicuous symptoms of this modification, or of these modifications or varieties, of remittent fever, as far as they may be considered general; reserving those which seem more properly of a local nature to another division of this subject."

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"If I have now sufficiently described this modification of remittent fever, as I consider it to be, through its obscurer modes and symptoms, and if I have also given such distinctive characters as shall enable any one, with a moderate degree of attention, to recognize it, I have hitherto spoken of it as a definite disease, occupying the usual periods of others and more severe remittents. This was necessary for the sake of distinctness, and that it might the more easily be compared with the ordinary and acknowledged remitting fever: but it is a description that will seldom apply in practice, as far as the duration of the disease is concerned; and, on this point, I must now proceed to offer some remarks.

Let me also here premise one observation, which, though already made, requires to be stated more distinctly and forcibly. This disease, in actual practice, is commonly of long duration, as I shall soon show; while it frequently follows a severe attack of decided remit-

tent, or an equally distinct one of quotidian or double tertian intermittent. It happens also that, according to season, or from the nature of the exciting cause of a fresh relapse, or from other circumstances, possibly not very apparent at present, it puts on rather the appearance of an intermitting than a remitting disease : the intervals, or intermissions, being perfect, perhaps long ; while, further, there may be a distinct cold stage, however short, at the renewal of each paroxysm. Thus might it equally have been classed under the head of chronic intermittent with the quotidian type ; though had I treated of it there, they who may now know it, or hereafter remark it, as a remitting disease without cold stages, might equally complain that I had misplaced it. There was but a choice ; and I have placed it in the division to which I have found it most frequently conform : while it is plain, that the dispute, should it arise, is not worth entertaining, inasmuch as the whole is but one disease under different modifications. It is, in short, the chronic febrile state of fever or fevers, which attend the unfortunate people who reside in the pestilential countries described in the essay on Malaria : putting on an endless variety of appearances, from which I have attempted to condense, as far as lay in my power, a general description adapted to the majority of cases, or at least capable of serving as a point of reference for disorders which differ in almost every individual. It is, in reality, the chronic marsh fever ; approaching, on one hand, to the acute and regular disease, and, on the other, to that undefined condition of the same nature which is so often called, simply, ill-health : while, as to type, it maintains the same gradation of character ; being continuous, in a limited sense, or remittent, or intermittent, just as are the severe marsh fevers to which it is affiliated. I am utterly indifferent where it is ranked, provided it be understood, for the sake of those who are its victims."

The remainder of this chapter is taken up with an account of some of the consequences of the obscure remittent fever ; with new illustrations of its character ; and a recapitulation of its leading symptoms. Our limits will admit of our copying but a few paragraphs. The following is a part of his recapitulation.

"It is a remittent fever, bearing all the characters of that disease as it is universally known ; but in a modified degree, and often so slight, as to require some attention in tracing its form and even its existence.

It is apt to become habitual, or to recur at frequent but variable intervals, during an indefinite course of years, so as even in some instances to occupy almost a long life. In such a course, it also varies its characters and symptoms, and in some cases, becomes a marked chronic intermittent ; while in others, the imperfection or

brevity of the intervals may cause it to appear as a continued febrile state.

Its accessions, when they are to be defined, are as various in duration as those of the ordinary severe remittent.

It is the sequel, in some cases, of quotidian intermittent or of double tertian : and if a mild fever of this nature follows a common tertian, the length of the interval will oblige us to rank it under tertian, as a chronic disease. It is also the sequel of common and acknowledged remittent ; and thus it may also be a sequel of what is called typhus fever, because the remittent is often thus misnamed. It is equally a sequel of what is called low fever or nervous fever, which, equally mistaken for a mild typhus, is a remittent. And these also are the proofs of the real nature and origin of this disease ; since it is their continuation, or forms varieties under them. And, while its causes must be sought in Malaria, (though others are not absolutely excluded, in our present state of knowledge) even when it occurs as a primary disease, this also establishes, even further if that were necessary, its true nature.

Chapter III. is appropriated to the proximate cause of remittent fever. Of this subject our author candidly confesses his ignorance.

"Physic knows not how the poison of fever acts, nor on what it acts ; what are the preliminary effects which produce the symptoms which are obvious to our senses. It cannot even conjecture why these actions should cease, why they should be renewed, and with a regularity, often not to be exceeded by that of a machine, or why they should cease to be renewed.

Doubtless, the inquiry is a most interesting one ; but how can we inquire when we have not the slightest element ascertained, on which an inquiry can be founded ?"

Dr. M. does not go into a critical review of the various theories or rather hypotheses of fever, but selecting that of Broussais, holds the following language :

"The fever of marshes, say others, under whatever form, is a gastro-enterite ; or, essentially and radically, it is but an inflammation of the inner membrane of the stomach and bowels, one or all ; and every other effect and symptom is sympathetic or consequential : or "adynamique," arising from "sur excitation." On this is the practice founded, by those who thus believe in the last new theory ; while, it is said, the success of the practice, consisting in bloodletting and so forth, proves the truth of that theory. Let us inquire as to both : to say nothing of the evil results which flow from acting upon this fashionable hypothesis.

But first of all, how can such an inflammation, and of such a membrane as this, generally, is, produce so deadly, so universal a disease ; a disease so abounding in symptoms, present and subsequent, so endlessly varied, and so fatal ? The stomach, and the bowels also, are often much more and more extensively inflamed, and without such fever, or such symptoms, or such effects. In these fevers there is often no pain, not even on pressure ; and where then is the inflammation ? Thousands of persons die with all the symptoms of this fever, even within a few days, within a day, within an hour ; the gastro-enterite, here, ought to be excessive, yet there is none, for there is no pain. There is none, for a much better reason ; that it is not found on dissection. We may refer to a thousand authors, for thousands of dissections, where, if the bowels and stomach have sometimes been found inflamed, there has not been the slightest trace of present or previous inflammation in numbers without counting. And if this were not enough, we find patients who die of fevers with very slender symptoms, where there has been no pain ; and yet dissection proves the bowels to have even been seriously ulcerated. If inflammation had killed the patient in any case, how is it to disappear and leave no trace ? and what species of essential cause or symptom is that which is not always present ?

Whatever dissections have taught, they have not taught us the cause of marsh fever ; and let him who doubts, read all the monstrous volumes on this subject. They have taught us that certain effects take place occasionally : that is their use : and the gastro-enterites, the inflammations, be they what they may, are, in reality, symptoms or effects : how far they must regulate the practice, is a question not for this place : but let them regulate it in as far as they are such, not as being the essence and the proximate cause, and then they may effect good and not harm."

Not wishing on this occasion, to enter into a full examination of the doctrines of the French school, we shall proceed with Dr. M. to the cure of the fever which we have been considering. This is the subject of Chapter IV, and runs through more than 30 pages. Observing in it, nothing new or particularly worthy of being detailed to our readers, we shall not trouble them with many extracts.

Dr. M. in fact renounces all intention of treating of the cure of the remittents of hot climates. He commences by 'separating, in some measure, the treatment of the acute from the chronic remittent, or the simple from the relapsing or habitual disease, since there are some important differences in the practice.'

The first remedy which he considers is emetics.

"That they do occasionally terminate, or at least shorten the fever, must be admitted; while they seem to be chiefly useful whenever the disorder is attended by an increased action of the liver, or in that variety which, with us, goes by the name of bilious fever."

Relying on our own observations and experience, we are constrained to say, that in the treatment of the remittent fever of this country, emetics are too much neglected. We have repeatedly seen them produce the happiest effects. If the force and fulness of the pulse be great, venesection should be premised; and to obtain from it the greatest good, a full narcotico-diaphoretic portion should always precede their operation.

Both at the commencement and through the course of the fever, Dr. M. seems to sanction the use of cathartics, though his remarks are variously qualified. Throughout the whole disease, in his opinion, a state of the bowels approaching as nearly to the natural one, as may be, should be preserved. But this would imply the use of laxatives to preserve, not of purgatives to increase the peristaltic motion. Such a state of the bowels in remittent fever is moreover quite imaginary. When all the secretions are disorderd, how can natural evacuations, as to manner and matter, be expected? They can only be obtained by curing the disease; and when they occur the patient is convalescent. The question is, whether cathartics can contribute to this cure? In the opinion of Broussais they cannot, but the reverse. If, however, they do harm, *ex necessitate*, how does it happen, that fever patients every day recover under their use, all over the United States? Dr. M. prefers 'rhubarb, senna, &c. which act chiefly or solely on the natural evacuations' of the digestion organs, to the saline purgatives, which evacuate the entire system, and produce debility. It is true, that the latter, occasion more copious secretion, especially when united with antimonials, but on that very account are better adapted than the resinous cathartics, to the *acute* forms of fever, while for the same reason, they are prejudicial in the

chronic and relapsing varieties; all of which are reproduced or aggravated, by debilitating measures. Of calomel Dr. M. is not an actual admirer, and believes that it is often abused; but when biliary derangements are manifest, either in acute or chronic remittents, he advises its use until the secretion of the liver becomes healthy, after which he thinks it does harm.

Sudorifics in the opinion of our author do but little good. Sweating and an abatement of the disease are often, perhaps generally, connected, but the latter is the cause not the effect. This on the whole is a sound opinion; and still we do not doubt, that promoting and maintaining a sweat, when it has begun to appear, may contribute to a more perfect solution of the disease. As a general rule opium should be combined with our sudorifies. When they are proper, it is admissible, and will contribute greatly to their effects. On this medicine our author has the following remarks.

"The use of opium requires also a few remarks, as it has been alternately lauded and condemned, chiefly from not attending to some very necessary distinctions. Generally, that it must be improper when it is necessary to administer purgatives, would be a natural conclusion; yet even here it is often useful, by facilitating the action of these from its antispasmodic effects; as it further is, by removing that irritation, which is apt to follow their salutary action.

As to its value in procuring sleep, though there may sometimes be even a state of drowsiness approaching to coma, and protracted also long through the disease, it is more common to meet with sleeplessness, or disturbed, or irregular rest; while I have even seen this consequence carried to such a degree, that the patient did not procure above an hour's sleep out of the twenty-four, during the whole period of six weeks which the disease lasted.

In all these cases, as long as the want of sleep is the produce of the febrile action, or attends the paroxysm, the use of opium serves but to increase the evil, as far as I have observed, or is productive of no advantage, at the best. But it does also happen, that during the remission, there remains an excitement, more visible in the faculties of the mind than in the body, preventing sleep; a condition under which opium is often advantageous, by procuring that rest which would not have come on till the new paroxysm was again ready to break it up. Thus also, as might be anticipated, it is more applicable towards the end than the commencement of the fever. With respect to its power as a stimulant remedy, whatever that be, its utility and application will be judged and guided by the same rules which regulate the use of wine."

On this subject we are disposed to express the opinion, founded on personal observation, that in remittent fever, opium is more safe and curative, than many physicians suppose. We have certainly known it administered freely throughout the paroxysm, with salutary effect. The tincture may be united with antimonial wine, or with the spirits of nitrous ether. The opinion that it might determine blood upon the brain, seems to us not well founded, provided depletion has preceded its use; while its power of calming the violent movements of the system, subduing its morbid sensibilities, and easing pain, entitles it to rank among our curative, not less than palliative remedies.

On food our author has, among others, the following judicious observations:

"In the most mild and chronic remittent, as was formerly remarked, the same bad effects, namely, increase of severity, or the protraction of the paroxysms, is a frequent consequence of the injudicious use of food There is but one period in which it can ever be given with safety, and that is, the interval, or remission; and, as I formerly noticed, the choice should fall on the commencement of that, while in the severer cases, where the distinction between the paroxysms is most imperfect, it is for the physician to watch the time when the least evil is likely to accrue, keeping in his mind these general principles.

And further, as, in many cases, this is a disease of debility, as it is indeed in all, after the commencement, it is plain that food, as far as the stomach can manage it, is even an important remedy."

The cold affusion, Dr. M. dismisses in a single paragraph. He thinks it adapted to the remittents of hot, rather than cold climates. We have found it beneficial in the fevers which are denominated typhus or continued; but are doubtful of its efficacy in remitting and intermitting fevers. Applied to the head, however, when affected with heat and pain, it often does good.

"If the use of bark, which may here stand as the representative of all the tonics, as it is that especially adopted, has been condemned by numerous and enlightened physicians in the proper remittent fever, there are not wanting as many who place confidence in it; guided sometimes by experience, and at others by habit, or by theories: just as is true of those who oppose its use. It is a complicated question; since, like every other one in this disorder, its utility or disadvantages will partly depend on the individual characters of cases, as of epidemics; not unfrequently on peculiarities in the pa-

tient himself, and on a variety of collateral circumstances as tedious to detail as they must be superfluous to medical readers. Without doubt, there are instances where, even though no inflammatory condition is present, it does not cure the disease, but aggravates, not merely the paroxysms but the entire disorder; whether, however, by any greater action than that of deranging and oppressing the stomach, appears uncertain. Even thus it may be pernicious: but I see no evidence of a very common opinion in physic, that, thus given, it is the cause of the glandular visceral diseases so common in these fevers, or so commonly following them. These occur equally where bark has not been given; they are often in existence even before the fever, and appear in many cases to be quite independent of it; while, ignorant as we are of their immediate causes or nature, we have no right to assume that they could be the result of a remedy with whose actions also we are equally unacquainted. This is one of the inconsequential and gratuitous conclusions in which physic abounds but too much; but it is one that is examined by evidence elsewhere, and on which I need not therefore now dwell.

The leading objection to the adoption of bark in this fever, is, however, derived from the presence of what is called inflammatory action, consisting in a high state of pulse and so forth, and very particularly from the presence of topical inflammation: and it is in these latter cases that it is so violently condemned by French physicians. Yet even here, opinions are divided; and it has often actually been found to be the remedy in such cases. It is as painful to a writer to leave his readers in suspense on points so essential, as it would be presumptuous to decide; yet it may be suggested that if, as will hereafter appear, the inflammatory affections of remittent are of a peculiar character, and not proper phlegmasiæ, and if certain visible and demonstrable ones are actually cured by this remedy, and aggravated by evacuants, the question will not improbably be decided in favour of those who recommend it in all cases; and it may not be difficult then to discover that prejudice or incorrect observation will explain that testimony against it which has been thought to be derived from experience.

The utility of bark or of tonics in general is, however, scarcely disputed in those cases where the symptoms are those of debility; and still more where they are what are called malignant; nor, in the advanced stages of a disease of this nature, even should the fever be almost continuous, or with imperfect remissions. Still less is it questioned when the length of the intervals and the perfections of the remissions have brought this disease into the congenerous class of intermittent fevers. As soon as that character is at all formed, this remedy may be used, and even by those who object to its general use, with the caution that it is not urged beyond the remission or intermission, if indeed that be necessary; and thus it often terminates at once a disorder, that might pass into a troublesome or chronic intermittent. For all else that belongs to its use, I may refer to the treatment of intermittents, hereafter discussed."

On the use of wine we extract the following observations :

"Theoretically, wine is held to be injurious, because it excites the action of the heart, and increases the tendency to inflammation, and because this disease is held to be of an inflammatory character. There are here two points involved ; and, to prove that wine must be injurious, it is necessary that both should be established. The question of experience forms a separate subject of consideration.

It may appear a very extraordinary doubt to suggest, against the almost uniform and continued opinion of physicians ; but is it proved that wine increases inflammation, when existing, or produces the tendency to it in healthy subjects or in diseased ones ? Will those who believe it ask themselves why they do so, and whether it is not one of the hereditary opinions of physic, established, no one knows why, and followed because it has been followed ? But, granting that there are cases of inflammation, or a species of inflammation which wine would increase, physicians know full well that they are utterly ignorant of the real distinctions among inflammation which, to the sense or the eye, may appear the same ; and that while there are some kinds or varieties which are to be cured by stimulants both local and general, as I shall hereafter show very fully, so are there inflammations, and apparently inflammatory states of the entire system with increase of circulation, where wine is a remedy instead of being injurious. Nor does it appear that the habitual use of wine produces a tendency to inflammation in healthy subjects ; since it is notorious that among water-drinkers, the diseases of active inflammation are most frequent, and require the most energetic treatment."

We come now to blood letting, a remedy, which most American physicians would place at the head of the means of cure in this disease ; for if not the most important, it is certainly one of the first in point of time. We shall make an extract of some length.

"That opinion is, that in the far greater number of cases occurring in our own country, the practice of blood-letting is most commonly nugatory or superfluous, or else injurious. But I must enter into some details on this subject.

In the first attack of the fever, and often through many successive diurnal periods, the pulse is hurried, contracted, hard, or full ; or the general appearance, to a common careless observer, is that of a state of circulation similar to what takes place in inflammatory affections. This state however is, when accurately viewed, the commencement or the first portion of the paroxysm, and its analogy is found in the similar state of circulation occurring in the first stage or stages of the intermittent paroxysm. And if it proves durable through any one diurnal period, or durable as it relates to the whole disease, it merely marks that condition of the paroxysm and of its returns,

which equally occurs in certain cases of the pure intermittent. In other instances, it will be found that the duration of this state of the circulation is brief; or it subsides without the interference of the practitioner, as the paroxysm itself proceeds towards remission.

This fact and this analogy ought to explain what the real nature of this particular condition in the remittent is; and if it is so generally mistaken for an inflammatory state, perhaps the term inflammatory fever, and the apparently groundless erection of a disease of this character by nosologists, has aided in establishing an opinion which must however be chiefly traced to that servility of routine by which the unthinking mass follows the road which a predominant theory or a prevailing fashion points out to them as the easy one: since, of this quality, must the mass be every where.

Further, it may happen that there is also presents some topical symptom, such for example as headach, the most common of all. How often headach it the result of conditions the most opposed to local inflammation or inflammatory action, I surely need not say; but if, in the case under review, it exists with this particular state of the circulation, it is easy to see how, under the previous theory or prejudice, it will be conceived to depend on a fixed topical affection of the brain. Thus also is a casual catarrh, not an unusual accident in this disease, attributed, under the same prejudice, to inflammatory action in the lungs; and thus even does it occur frequently, that such a combination is actually mistaken for pleurisy or peripneumony. The same reasoning applies to other topical affections, and I need not therefore dwell on it; besides which, as I have already suggested in speaking of bark, and shall hereafter explain more distinctly, the predominant, I do not say the whole of the topical inflammatory affections in this disease, are of a peculiar character, and not true phlegmasiæ. And, if I wished for a very high authority of a somewhat distant date on this point, as I have, in speaking of intermittent, alluded to many modern ones, I would refer to Lobb, who decidedly rejects blood-letting in fevers of this nature, however violent and inflammatory the symptoms; and even in the cases where acute pleurisy or rheumatism are present, or in the diseases so often considered as pure pleurisy and pure acute rheumatism. It is not, however, for me to deny that real inflammations requiring the lancet, may exist or have existed in recorded cases that have not come under my own recognisance.

It is easy therefore to see the causes which, united to a prejudice, or in hands governed by a routine, lead to that which I here consider an erroneous judgment; and I may now inquire what the effects of blood-letting really are; since, although in the majority of cases, it is, as commonly practised, injurious, as there are others in which it is without important effects of any kind, there are a few in which, under restrictions, it appears beneficial.

In a robust patient, at the first attack of the disease, and when the fever is the first of its kind to that patient, blood-letting is often useful, and at least not injurious. Its good effect is that of reducing that

activity of the circulating system, or that vigour generally, which renders the first portion of the paroxysm correspondently energetic ; thus moderating the whole result, not only of the first, but also of the subsequent paroxysms, and consequently of the total disease. And to judge respecting the propriety of its repetition, we must be guided by the same rules : a consideration of the constitution and character of the patient, and further, not merely of the appearance of the disease in that patient, but of the prevailing character which the endemic of that particular season may possess : as it is most certain that in different seasons, the remittent does vary most essentially in its character."

This subject is one of deep interest to us all. We are convinced that the fevers of some autumns do not call for the lancet ; and are even made worse by its employment ; while those of other years cannot be successfully treated, if it is neglected. We doubt, however, whether the autumnal fever of the United States, is ever, strictly speaking, cured, by blood letting, as it cures a pleurisy or peritonitis. Still, it contributes to preserve the life of the patient, and is, therefore, an important remedy. In many cases it is a *sine qua non* to his recovery, not by shortening the disease, but preventing its destroying life. Of course it is most requisite in the sanguine and plethoric, whose vital organs are most apt to suffer from a great volume of blood, put into violent motion, by the morbid contractions, a powerful and irritated circulatory system. In such cases, a copious blood letting, which may even be repeated once or twice, employed in the early periods of the disease, and during the increase or achme of the hot stage, may produce every other beneficial effect, except preventing the return of the paroxysm. In these cases we should bleed, for nearly the same reason, that we bleed in the eruptive fever of small pox—not to cure but to mitigate the disease. The latter is seldom accomplished. The malady, once established, will in general hold on its course, for, like many other morbid states, it has a period of its own, which may vary in duration exceedingly, it is true ; but within which, certain morbid changes must be passed through, as in measles or the artificial disease, termed narcotism by the French, which comprehends the morbid effects of a large dose of opium. If the fever be violent, its course will be short ; if mild, more

protracted. Blood letting (except in the first paroxysm) can only moderate the former, and cannot cure even the latter ; in the treatment of which it is, in general, not required.

In epidemics, when the tendency is to terminate by a crisis, at or about the end of the first week, blood letting is in general most necessary and beneficial ; in those which are prone to assume an intermittent type, it is less needed ; in those which tend to a typhus character, it is often prejudicial. We are aware, that many physicians believe, that the typhus stage may be prevented by blood letting, and occurs from its omission ; but others have observed, that in certain epidemics, no resort to the lancet will ward off that perplexing and dangerous stage ; and that it will even be more certainly induced by copious depletion, especially in the advanced periods of the remittent. The fact seems to be, that it is the inherent tendency of such epidemics to become typhoid, which the lancet favours rather than prevents.

As to blood letting in the fevers termed congestive, which since the dissemination of Dr. Armstrong's work on typhus, have become so prevalent in the West and South, we are not prepared to speak decidedly. The central organs in these cases are inundated with blood, at the expense of the circumference, and if they cannot be relieved but by blood letting, it should be employed. We ought never to forget, however, that debility of some sort, the immediate effect, perhaps, of the remote cause, is, itself, the cause of these internal accumulations ; and that as blood letting is, in its nature, a debilitating measure, it *may* do harm instead of good. In full habits, however, it is no doubt admissible and even necessary ; though we cannot believe, that its repetition is in general either requisite or safe.

On the subject of local blood letting, Dr. M. says but little ; much less, indeed, than the fashionable—perhaps intrinsic—importance of this remedy calls for. On cupping and leeching over the epigastrium, he is silent, though we are compelled to believe, that it is one of the remedies for remittent fever, on which reliance should be placed. Whatever may be the difference of opinion in the profession, as to an original gastro-

enteritis, in this fever, it is undeniable, that in its progress the epigastric viscera, are liable to suffer deeply ; and to their relief, few things are so well adapted, as local blood letting. We consider it a matter of regret, that throughout all the interior of the United States, every where indeed out of the large cities, our physicians, are unable to resort to leeching, and at the same time, most of them are unprovided with a cupping apparatus, and unpractised in its application. For the latter deficiency there is no excuse, whatever apology there may be for the former. In our own practice we have certainly derived from epigastric cupping, advantages which have appeared to us unattainable by any other means.

Not remotely connected with this subject is blistering. Of this remedy Dr. M. does not speak in very favourable terms. He informs us that he witnessed—

"In a hospital practice of great extent, and through a long course of years, the invariable use of blisters in these cases by one physician, and the as invariable neglect of them by the other, in equal attendance ; when the results, as proved by the registers, were absolutely equal for both, during the whole period."

This is certainly an important statistical fact, which we take the more interest in disseminating, because we know, that in the western country, there are many, otherwise judicious, physicians, who subject their fever patients to unmitigated blistering, a practice which has long appeared to us equally unnecessary and cruel.

The close of this chapter is on the cure of the chronic obscure and relapsing remittent. For this purpose the bark and arsenic might be supposed useful, but Dr. M. thinks them of little value ; and, indeed, reposes no confidence in any medicine.

"I know not that I should be very wrong if I were to commence by saying, in an equally sweeping manner as of the simpler modification of remittent last discussed, or of the simple fever without returns, that it is incurable by medicines, or beyond their power. I know of no great average of instances at least, in which the returns or relapses have been prevented by mere medicines, or where those seem to exert any influence for good, over the paroxysms of each relapse, or over the total state of a whole relapse. The inveterate career of this disease appears to be equal to its obstinacy of character in each recurrence.

If however the relapses be severe, the same rules apply as to the single disease, and those I need not repeat ; but that relapse past, no remedy, no medicine at least, appears to prevent the habitual and expected return ; or the returns are the same in point of period and force, where medicines have been used in the interval and where they have not. And it is in this disease that bark, arsenic, and the remainder of the tonic remedies, seem to be peculiarly without power ; and not less so when the intermissions during the relapse, or the commencement of each paroxysm, are so well marked as to leave no hesitation in referring it to the quotidian and double tertian rather than to the proper remittent.

This at least is the result of my experience, and pretty generally of my reading also ; but I shall be very well pleased to be contradicted by any one who may have had more success with medicines ; as there is perhaps no disease in the whole catalogue of human miseries, attended with greater suffering, and not one with equal inconvenience. To spend years of life in the sufferings of fever, sufferings which a spectator cannot appreciate or even comprehend, indefinite as they are, and unmarked by visible disease or by absolute pain, however well known to those who have felt what fever is, might be even misery enough, comprising as they do, bodily evils as unceasing as they are numerous and distressing. Add to this, nights resembling the days, sleeplessness, often with that delirious activity of mind which aggravates the present as it anticipates further evil, which longs not to think, but is compelled to be ever thinking : add to it the consciousness of ability for mental exertion, yet the perpetual torment of being forever checked in the attempt, the utter insensibility to every pleasurable feeling or impression, the dark present and the darker future, the " lasciate la speranza " which is so highly characteristic of this disease ; add to it again the persevering coma, where the patient cannot rouse himself, yet cannot sleep, and a slight idea, slight indeed, may be formed of this tormenting disorder ; less known, fortunately, in our happier climate, than to those pestiferous regions described in the first part of this essay, in which life is, most literally and truly, one long disease, and where death is indeed the only physician."

## It is on change of situation only that reliance can be placed.

" Of what is in our power, if it is always just to the patient to labour through the whole round of tonics, with whatever little hope, there is nothing which seems really efficacious but change of habits ; change of air, change of climate, change of every thing. And thus is the disease sometimes extirpated. But the value of this remedy is greatest when that change is from a soil productive of Malaria, or from any other situation generative of the causes of the disease ; for by this is it often kept up, when it would otherwise disappear. Thus, as I formerly hinted, is it often supposed to be an habitual disease of the constitution, or even a disease dependent on organic affections, when, in truth, it is not a disease of relapses, but a succession of new diseases, produced by repeated applications of the cause."

In proof of the great importance of a change of place, Dr. M. cites the following important facts.

"In the first example, out of sixteen men from a frigate, under the African fever and in the hospital, eight were taken on board and to sea, the other half being left on shore ; the consequence being, that all the former cases recovered perfectly and without relapse, while every one of the remainder subsided into an obstinate intermittent. This is a pointed case on a small scale. A recent and a very conspicuous proof, on a far greater one, of the utility of removing the convalescents from fevers to a healthy district, occurred at Rangoon in the late Birman war : the troops, in great numbers, which had continued to be sick and incapable of duty for many months at that place, after the fever, having recovered immediately and perfectly on their removal to Mergui."

After citing some other examples, our author goes on to remark :

"Here then we see more distinctly, the value of the remarks on pernicious soils and on the propagation of Malaria, which have been detailed in the essay on that subject. It is this study which must form the real basis of the cure, in this as in all the chronic or repeated intermittents. The cure consists in the avoidance of fresh causes, new excitements : and, to be enabled to apply it, these must be familiarly known, accurately studied, and carefully investigated. He who would be the real physician here, must be the acute observer and the philosophical naturalist ; for where he cannot act he must learn to avoid, since the cure is negative, and in avoidance is the remedy."

The conclusion of this chapter is on the treatment of those organic, visceral affections, which are connected with the chronic and relapsing remittent. The only medicine of which he treats is mercury.

"On the presumption that the chronic fevers of this class were necessarily connected with organic diseases of the visceral glands, this remedy has naturally been recommended and followed. That it does act in the chronic inflammation of the liver as in the acute one, admits of no doubt : but there are many physicians of far greater experience than myself, who doubt with me of its power over the other chronic diseases, the real permanent diseases, or the obstructions as they are called, whether of the liver or the spleen. But this is a subject by no means so clear, difficult as it is to discover what the exact state or nature of the disease in these glands may be, as to prevent us from trying a remedy which is often doubtless a powerful

one. That it is a practice often rashly and injuriously pursued in the present day, and especially in England, is however but too plain; while it is easy to trace the origin of this pernicious abuse to the physicians of our colonies, and especially to opinions formed and fostered in India."

Our author continues his strictures on the use and abuse of calomel in these disorders for a page or two, when he comes to say:

"On the other hand, now, so intricate is physic in every point, there can be no question that in this assertion there is some truth, or that there are cases in which mercury does most clearly produce a cure. That it has produced such cures while it also removed glandular affections, there is no doubt; while it is further possible that the cure of these disorders may have been the removal of the causes of the fever. But it is certain also, that it does cure this disposition to the renewal of fevers, even when there is the most perfect demonstration of a healthy state of all the viscera. In this case it seems to act by inducing a new disease, or an entire change of habits; just as acute diseases of various kinds remove it, or it is removed by any other important change in all the habits. Thus have I seen habitual fevers of this nature gradually disappearing under the use of mercury, while it was easy to trace the progressive connexion between the effects of the remedy and the diminution of the disease."

Without professing or feeling exactly the same dread of mercury, in these disorders, as our author, we do not hesitate to express the opinion, that in this country, it is often prescribed in organic affections of the viscera, both abdominal and thoracic, when it should be withheld. Not that we would entirely prohibit its use. In minute doses, both calomel and the pil. hydrargyri may be continued for several days with advantage; and an *occasional* cathartic portion, will often afford that relief, which no other remedy can give. What we object to, is a liberal or protracted use of these medicines, under the good old indefinite term alterative, until they excite a debilitating mercurial irritation, which cannot cure, and seldom fails to make the patient worse.

*Dysentery, Diarrhœa and Cholera*, are the subjects of Chapter V. The main object of our author, is to show that they have a common origin with Remittents; but in expressing his doubts, whether they ever come from intense heat acting on the

body, as many writers suppose, he does not undertake to assign a reason, why, at different times, malaria can produce diseases so unlike as dysentery and ague.

The following paragraph presents facts, which are, certainly, not applicable to this country.

"If heat alone were the cause of cholera it should be produced in the earlier parts of the summer, supposing that such summer had been both early and warm; or if it required one month, or two, of the sun's action to generate this derangement of the liver, it should be indifferent at what part of the year that was exerted. The same argument indeed applies to the case of remittent; equally, and probably under the same error, supposed by many physicians to be the produce of mere heat. But, in practice, cholera, as well as remittent, is a disease of autumn; or it appears together with fever and dysentery, after a long, or a certain, duration of heat, and when, as is now admitted in as far as remittent and dysentery are concerned, some change has taken place in the vegetating surface of the soil, to which is owing the production of Malaria."

From observations continued for nearly thirty years, at Cincinnati, we are enabled to state, that cholera and diarrhœa do not appear, simultaneously, with remittent fever; but in general, precede it; invariably commencing before the solstice, while fever as constantly sets in after that period. Infact, they are the offspring—direct or indirect, which we do not pretend to say—of the first intense heat, and, therefore, often commence by the 20th of May; while, in other years, according to the development of great heat, they are postponed to the latter end of June. Moreover, we have known them nearly suspended by the occurrence of cool weather, and seen them recommence with its cessation. Nearly the same remarks are applicable to dysentery, though, on the whole, it is of later occurrence, and is, therefore, often associated with remittent fever. The natural order of succession seems to be, cholera and diarrhœa, dysentery, remittent fever, ague: the two first in early summer, the third at mid-summer, the fourth in its decline, and the fifth in autumn.

Having as he conceived, assimilated the intestinal affections just mentioned, to remittent and intermittent fevers, our author

comes to speak of the last, which makes the subject of the next four chapters of his work.

He sets out with the following declaration concerning the cause of this form of fever :

"That intermittents, of whatever type, are the produce of Malaria, is a fact as universally established as any thing in medicine can well be ; while, as I have formerly observed, it is by no means proved that there is any other cause, at least of the original disease, or first attack, however such causes may have the power of re-exciting an intermittent where it has once existed."

The remainder of the chapter from which this paragraph is extracted, comprises the history of simple intermittents, and we shall notice it no further than to make the following excerpt :

"Thus, and for obvious reasons, it is also a general rule, that the vernal diseases, being intermittents or otherwise, are more inflammatory ; while the fevers of autumn are more generally malignant, or have the characters attending debility, together also with a greater predominance of bilious affections. And if we proceed along the season in the same manner, we shall find that while remittents continue in their proper form during the hot weather, they begin to intermit, even in hot climates, on the setting in of the cold. A natural conclusion which follows this, is, that be the power or effect of Malaria what it may, or however its production may be regulated by the state of temperature and the corresponding conditions of vegetation, there is, in the mere action itself of heat on the body, an accessary cause which is of considerable effect in determining the form and character of marsh fever. The well-known rarity of simple and original intermittents near the equator, must therefore be supposed to depend on these different circumstances combined. That, of the different types, quotidian and tertian are the general intermittents of spring, and quartans those of autumn, is a remark as old as physic itself."

Chapter VII. is on anomalous, obscure and simulating intermittents. In the beginning we find the following general observations.

"Let me therefore now remark, that in remittent fever, there may be present, inflammations of the brain, of the lungs or the pleura, of the throat, (anginæ of different characters,) of the bronchial membrane (catarrhs, of the stomach, the intestines, the liver, the spleen, the peritoneum, perhaps of other internal organs or viscera, and also of the muscles and ligaments (rheumatisms :) all of these vary-

ing in their intensities, in whole epidemics as in individuals, and thus, at one extreme, producing cases, which, under peculiar characters also in the essential fever, may simulate, or almost equal, cases of phrenitis, pleurisy, and so forth; calling for material variations in the practice, and not unfrequently becoming the grounds of most inconvenient disputes among physicians not sufficiently aware of the nature of what they had not witnessed; as also of recommendations as to the treatment, not less easily misapplied, and frequently highly pernicious in their results.

Now if these local affections occur in remittents, or, as must equally happen, in marsh fevers of a continuous character, sometimes even leading to error as to the fundamental nature and cause of the disease, or passing for pure inflammatory diseases whenever the physician is unaware of the nature of the epidemic, or when its true character has not yet betrayed itself, so they occur also in the severer intermittents, as might, without much effort of thought, be expected. In these cases perhaps, the varieties are not only greater, but error is even more easy. The inflammatory, or local affections, be they what they may, may be slender and truly supplementary; but they may also prevail so far above the fever, as in remittent, that they may appear to be a distinct disease, or the superior one; while if, further, the local affection should be permanent or continuous, when the fever has its intermissions, and perhaps long ones, as in quartan, and while, still further, that fever may not be very conspicuous compared to the local symptoms, it is easy to see that erroneous views and erroneous practice may follow.

Though I have thus referred only to the inflammatory local affections, as the most conspicuous in deducing this resemblance between the varieties of remittent and intermittent, the same analogy holds as to other variations or combinations, among which the nervous diseases, to use a popular term, form the great mass; or, as there is a pleuritic remittent and a pleuritic intermittent, so apoplexy or palsy may be united in different modes to either mode of marsh fever. Such diseases, or such varieties of intermittent, will here be enumerated as far as they are known to myself, and also where, having never met with them, I can borrow from valid authorities; but I must now state, generally, the reasons why I have made of this subject so extensive and detailed a chapter, and how far what I have described, differs from what will be found in authors on intermittent fevers."

After these and other general introductory remarks, Dr. M. comes to treat of apoplexy as an accompaniment of certain intermittents.

"I formerly noticed the apoplectic state which sometimes commenced the attack of intermittent as well as of remittent; but it is necessary to recur to it here, on account of its great importance as connected with the practice in these disorders, and because of other analogous symptoms sometimes occurring. This state is not limited,

either to the first attack or to the acuter forms of these fevers, although in Italy that appears to be the most common mode of its occurrence; as I have seen, in this country, a perfect apoplexy, to the eye, in all its characters, sufficient to deceive both the attending practitioner and the friends, lasting for eight hours, and occurring in a chronic tertian of many years standing, as a substitute for the cold fit."

Our author considers it important not to confound this state with original apoplexy, inasmuch, as the chief remedy of that disease, blood letting, is in his opinion extremely mischievous here. A modified condition of this symptom is lethargy or coma, which may either usher in an intermittent like apoplexy, or attend on its chronic forms. Our author then proceeds to speak of palsies. These are sometimes the inevitable consequence of the intermittent, but oftener in his opinion the effect of treating the apoplectic or comatose state by blood-letting. They are of course not to be cured by that remedy, which often renders them permanent, when they would otherwise be transitory. Dr. M's views on this point are sufficiently set forth in the following paragraph.

"The practical error in the case of such paralytic affections, is the same as that in the former two conditions; the imagining a "flow of blood to the head," and a palsy to be treated by bleeding and evacuants; and the result very often is, perhaps in severe attacks always, to confirm as a perpetual palsy, that which would have passed away of itself, had there been no interference, or which would have been removed by the common remedies for intermittent. If there are many other cases of palsy occurring in practice, which might otherwise have been temporary, whether arising from the effects of cold or not, and which have been rendered incurable by this pernicious and common treatment, I have little doubt that innumerable ones will be found, by those who have the means of making the inquiry, where this result has been the consequence of such evacuations applied in the palsy of the intermittent."

On the subject of intermittents and palsies, Dr. M. has an extended series of observations and reflections, to which he attaches great importance, as appears from the following sentence:

"So important do I consider this view of paralytic diseases, and so entirely have I found it neglected, even by modern and recent writers on palsy, as well as by writers on intermittent, that I almost wish I dared take room for such cases as might serve to make a deeper im-

pression than what I ought perhaps to expect from this general statement, strongly as I wish to urge it by thus dwelling on it."

## In many instances these palsies are strongly pronounced.

"But besides the more palpable and sudden paralytic affections attending intermittent, and under whatever modification or in whatever stage of the disease they occur, there are others of a more gradual nature which it is necessary to point out, not merely from their bearings on the practice in this disease, but from the light which they throw on the nature of intermittent, and very particularly on the other local affections belonging to it. If the variety in the effects or the appearances may be considerable, regulated as these must be by the nature of the nerves affected, and by the extent of the affection, it will be sufficient to describe one of these cases, and that account will perhaps also form the most convenient description.

This was an instance of a relapsing or chronic quotidian, in which there had, at no previous time, been observed any affections of this nature. During the relapse in question, which lasted the more general time of six weeks or two months, there came gradually on, a feeling of weakness in one leg, and more particularly in the foot, which increased so much during the disorder, that the patient could with difficulty make a step on that foot. And although there was no pain, or Neuralgia, it was easy to trace with the finger the course of the fibular nerve from the middle of the leg into the foot; as the slightest passage of the finger over it was attended by the well known tingling sensation produced by a pressed nerve; while a stronger pressure where it is nearest the surface, gave the equally well-known shock produced by striking the elbow, in another superficial nerve. It was obvious that the muscles chiefly affected in this case, were those to which this nerve principally belonged, and therefore that it was in a diseased state; that derangement appearing to consist in a diminution of its energy or power, added to an increased or morbid sensibility. The analogy of this to the proper Neuralgia is evident; and it must be considered, in fact, as a modified degree of this disorder, offering one of the proofs, out of so many, respecting the real nature of this disease, or its connexion with the intermittent and Malaria.

In this case, the relapse now described was succeeded by one much more severe, and successively by a third, more serious still. In these, the affection of the nerve of the leg, which had become little noticed during the interval, returned with increased severity; while, in the first, there came on a similar affection of the ulnar nerve of the right arm, and in the second, a similar one of the left; the others remaining. In this, most complete attack, the courses of the nerves in both arms could equally be traced by the finger in the same manner; while, further, the patient was unable to extend the arms without immediately feeling the tingling, as of a compressed nerve, along the whole course, from the arm-pit to the fingers; that sensation being

increased by increasing the extension. And in this case also, it was evident that the muscles chiefly supplied from those nerves were the ones affected ; being feeble, or occasionally benumbed, as in the leg. Whatever be the exact affection of the nerve in this case, it is plain that it must be of a local, and, if I may use such a term, of an anatomical nature ; or that it was one which might possibly have been ascertained by dissection and inspection, had that been possible, and were we sufficiently acquainted with the intimate or ultimate structure of a nerve.

I need only further add respecting this case, that while the nerves of the arms recovered, yet very slowly, after the cessation of the fever, that of the leg remained diseased for many years after, and perhaps continues so still ; extremely sensible on casual pressure, even as far as the toe, so as to render great preeaution necessary in walking, while the debility of that leg remained equally marked. If we see here the resemblance of this condition to that which succeeds to decided Neuralgia, so is its resemblance to the effect of sciatica on that particular nerve eqcally obvious ; while I propose hereafter to consider sciatica, in all cases, as a pure and perfect Neuralgia."

Having spoken of apoplexy and palsy as casualties connected with intermittents, our author, in following out his subject, is led to enumerate and illustrate, a great number of consequences of intermittent fever, especially when they become chronic. In the first place he remarks :

"It is a noted fact, that it is the effect of chronic or habitual intermittents to injure or destroy the intellectual faculties, as I had occasion to point out already when treating of remittents. This is notorious in the countries where these disorders prevail, and very remarkably, as I formerly said, in the Maremma of Tuscany, where even absolute idiotism from this cause is common ; the fact being marked, even to cursory travellers, by that apathy, listlessness, or indolence of mind, gradually approaching to fatuity, which I formerly described. If the cause be obscure, it cannot well be more obscure than every thing else which belongs to the action of Malaria ; while the fact of the universal influence of this poison on the nervous system, local as well as general, leaves no difficulty, at least in believing that it may produce such effects on the mind." D.

[*To be continued in the next Number.*]

# MISCELLANEOUS INTELLIGENCE.

## *ANALECTIC, ANALYTICAL, AND ORIGINAL.*

### I. Analectic.

1. *Nerves of the Placenta.*—We find in the *Journal des Progres*, a paper on the nerves of the placenta, accompanied with a beautiful lithographic drawing, exhibiting the results of examtions made by Mr. Bauer under Sir Everard Home's directions.

Sir Everard's researches on the incubated egg, led him to suppose the arteries are developed under the influence of nerves, and he accordingly engaged Mr. Bauer to investigate the subject, with the aid of those wonderful lenses which have given such eclat both to him and his patron.

Mr. Bauer was furnished with the placenta of a seal preserved in spirits, and as the vessels of the cord are not twisted in that animal, he would have a better opportunity of ascertaining the existence of nerves if they should really exist. They would have lost, also, their transparency by the coagulating power of the spirit, and consequently be less apt to escape observation. That gentleman did discover nerves accompanying the vessels of the cord, and also found and exhibited them in the uterine portion of the placenta.

Sir Everard Home thinks that the discovery of nerves in the placenta leads fairly to the inference, that the brain of the fœtus has a real nervous connexion with that of the mother, may serve to explain why children have been born, affected with small pox and with intermittent fever ; and that we should be no longer astonished at the birth of acephalous fœtuses, since the nerves of the mother have had an intercourse with the organs of the monster. The influence of moral causes affecting the mother, and extending to her offspring, need no longer be considered as wholly unintelligible.

2. *Urachus.*—Dr. Hofmeister, in the Zeitschr, fur Nat und Heilk. Vol V. No. 6. relates the history of a singular case. A boy two years old had at the naval a fleshy excrescence which

was fungous, red and pedunculated, through which the urine escaped whenever his body was bent backwards. The canal of the urethra was quite pervious, and admitted of the passage of urine. The pedicle of the fungus was secured with a ligature and fell off; the part was cicatrized, and the urine ceased to flow through the channel. It was thought to be the remains of the urachus.

3. *State of the Uteras eight years after the performance of the Caesarian Operation.*—The operation had been performed eight years before by Dr. WALTHER; the uterus was of its natural form and dimensions. At the external surface of the anterior parietes, a furrow three lines in length, indicates the place where the incision was made; the peritoneum is very firmly adherent to it.

The edges of the wound were contracted and turned in. The inner cicatrix was lower down, and half an inch longer than the outer one; it extended as low as the neck. The anterior parietes of the uterus in the neighborhood of the cicatrix was three lines thick; the posterior parietes opposite to it was four lines. The cavity of the uterus was perfectly natural, except that there was a very thin fleshy polypus at the neck. The left tube and ovary were perfectly natural; those on the right adhered to each other by plastic lymph.

The account of the uterus above described is given in GRAAFE and WALTHER's Journal by Mr. MAYER of Bonn.

4. *Lymphatics and Veins communicate with each other.*—At the Royal Institute of France, on the 17th of August, M. DUBLED announced by letter, that he had filled the lower two-thirds of the thoracic duct and several lymphatic vessels by injecting the lower cava. He found it necessary to produce a considerable distension of the cava in order to obtain this result. He also made the following experiment. He tied the vena cava just below the diaphragm in a living animal; several hours afterwards he found blood in the thoracic duct and in some lymphatic vessels.

5. *Abnormal Menstruation.*—We obtain from the *Nouvelle Bibliotheque Medicale*, the following account of abnormal menstruation, which was published in HUFELAND's Journal.

A woman ceased to menstruate at forty-one years of age, and became perfectly regular again at seventy-four. A woman aged sixty-one was still regular in menstruating, although she had begun at the age of thirteen years. She had not conceived for more than twenty years. She applied for medical advice on account of loss of strength. She took every day, for three months, two grains of alum, three of nitrate of potassa, and

one-tenth of a grain of opium, sometimes with sugar and canella, sometimes in solution : the catamenia gradually diminished without occasioning any inconvenience in regard to her health. A Jewish child, eight years old, had discharged for three days about three desert spoonfuls of blood. One drop of Haller's acid elixir, half an ounce of distilled water, and the same quantity of syrup of canella, taken in doses of a desert spoonful morning and evening, occasioned this premature menstruation to cease without affecting the child's health.

6. *Wedemeyer on the Circulation.*—In the Quarterly Summary of our last number, we noticed Dr. WEDEMEYER's opinion, that the movement of the blood in the capillaries results chiefly from the action of the heart, and not of the great vessels. We shall now give his views on the question, whether the movement of the blood in them does at all depend on the contractility of the small arteries and of the capillaries themselves.

His researches led him to conclude with confidence, that the small arteries are endowed with a certain degree of contractile power. BICHAT had asserted that the mildest and most inert fluids could not, during life, be injected from arteries into veins in consequence of the contraction of the capillary vessels ; but MARGENDIE states that even irritating liquors can be forced through. Dr. WEDEMEYER has proved by his own experiments that water can be forced from arteries into veins during the life of the subject, but that the passage of very active irritants is retarded, and even totally prevented, by the contraction of the capillary intermediate vessels. He laid bare the brachial artery and humeral vein of a horse, and having cut them, pushed an injection of tepid water into the lower portion of the artery, and at every thrust of the piston, the water was seen to flow out of the lower portion of the divided veins, and to stop flowing when he ceased to inject into the artery : a very slight force only was required. On substituting cold alcohol for the tepid water, a much greater degree of force was required to make the fluid which escaped from the veins give evidence, by smell and taste, that it was the same as was thrown in by the syringe ; and in spite of the force, it did not escape in jets, but only oozed out. In another horse the experiment was tried with vinegar, and succeeded at first as well as when made with water, but the capillaries gradually contracted, so as finally to prevent the transmission of the acid entirely. These experiments were often repeated, and with the same or very analogous results, and led to the conclusion, that the capillary vessels are endowed with the power of self contraction in a very high degree, when violently stimulated ; a contractile power which is purely vital. If it be objected that the alcohol and vinegar

were arrested by a chemical change induced by them, it is sufficient to observe, that after death they pass as readily as warm water.

Dr. WEDEMEYER made many microscopic observations on the capillaries, as affected by the direct application of various stimulants. These are not exhibited in the *Archives*, which presents us, however, with a view of his experiments on the capillaries, made in order to ascertain the effects produced upon them by galvanism.

When small arteries are touched with either the positive or negative wire of a pile composed of from fourteen to twenty four pairs, we observe in from ten to thirty seconds, and sometimes at the instant of contact, a contraction of their parietes, which may amount to one-fourth, one-half, or even three-fourths of their diameter. The blood flows more rapidly in vessels thus contracted, but nearer to the heart the arteries are dilated, and the course of the blood less rapid. Sometimes this contraction lasts for hours together, but at others for only about ten minutes, after which the vessels recover their caliber. A second application most commonly produces no apparent effect. He never observed that the small veins, subjected to this experiment, were contracted, except in one solitary instance ; while, on the contrary, in every other case, they were gradually dilated, and the flow of the blood in them became slower and slower, or even stopped completely. The effect (secondary,) of galvanism on the capillaries was still more remarkable, for in the course of a minute the flow of the blood became very much diminished, was wholly suspended, and that fluid was actually coagulated : the capillaries appeared to be dilated, and those which were before colourless and transparent, were soon found to be of a lively red, as if inflamed.

He regards the contractility proved by the experiments to exist, as analogous to that in the urethra, in the small ramifications of the bronchiæ, in the corion of the skin, &c. It is never manifest in the ordinary state of the circulation, but only on the application of certain stimulants. It does not contribute at all to the movement of the blood in the capillary vessels, but, on the contrary, as HALLER remarked, serves rather to retard and embarrass it. The same he thinks to be true of the small arteries. He says that the motion of the blood in the capillaries is arrested as soon as we tie up the aorta near the heart, and that those who have made a statement contrary to this, have been misled by particular circumstances.

7. *Case in which no Division existed between the Ventricles of the Heart.*—A case of this kind is related by Dr. Wittchke, in Hufeland and Osann's Journal for April. 1828.

The patient was twenty-four years of age; had from his infancy been affected with a peculiar palpitation of the heart, unattended by any other symptom of disease. Five years ago, after an inflammation of the chest, the palpitation augmented in violence; he appeared sometimes to be in danger of suffocation. The palpitation and sense of suffocation abated when he sat upright, and pressed his breast firmly against any hard body. Medical treatment rendered him no relief; the occurrence of hemorrhoids appeared, however, in some measure to render his sufferings more tolerable. Finally, the accessions of suffocation became more violent, particularly at night; the only position in which the patient could find any ease was sitting upright. By degrees œdema of the feet showed itself, and extended to the legs; at length the abdomen became distended from effusion, and the scrotum was swollen to a great extent. His countenance was livid, swollen, and of a doughy appearance. The upper extremities presented the same phenomena.

He was first visited by Dr. W. on the 17th of November, 1825; he found him lying in bed, with his head and shoulders greatly elevated, and unable to rise. The preceding night he had suffered a very severe attack of suffocation; for fear of a return of which, he begged, with tears in his eyes, that the doctor, by puncturing the abdomen, would relieve him of the load of water which it contained, and thus enable him to assume the erect posture. His carotids throbbed violently; the heart beat with such force that the whole of the left side of the chest was shook by its action. The motions of the chest were distinct, commencing above and extending downwards. The pulse was regular, somewhat tense, and moderately full, ninety in a minute. The respiration was rattling, as though some obstruction existed in the trachea. The patient could speak only with great difficulty; the tone of the voice was hoarse and low. The body presented all the symptoms of extensive general dropsy. Appetite and digestion not particularly affected, the tongue very red and clean; great thirst; the skin had the feel of dry parchment. The skin on the fore part of the scrotum, being irritated by the passage of the urine over it, presented an erysipelatous appearance; as also did the calves of the legs. The patient complained of considerable pain of the left thigh.

Although the dropsy was viewed as a mere symptom yet with a view to the mitigation of his sufferings the abdomen was

punctured. Diuretics and other palliative treatment were prescribed with temporary relief, but the patient died on the 30th.

8. *Sectio cadaveris.* The thorax only examined; it contained about a pint of bloody serum. Lungs healthy, but pressed backwards, in consequence of the augmented size of the heart; they were not greatly distended with blood, and nowhere adhered to the pleura. The pericardium adhered completely to the surface of the heart, with the exception of that part which is next the diaphragm, where not a trace of it was discoverable, the heart lying immediately upon the latter. The heart was at least three times its normal size, and filled with a considerable quantity of black half coagulated blood; the parietes of both ventricles being of a thickness proportionate to the augmented bulk of the organs. The most remarkable circumstance was the absence of the septum ventriculorum, of which not a trace remained; notwithstanding which, the openings of the great vessels were entirely natural, excepting that those of the veins were somewhat enlarged; the valves perfect. The auricles, with the exception of their increased size, were also in every respect natural. The aorta arose very straight, and was filled with a fibrous coagulum. The veins were collapsed, and contained a small quantity of fluid blood; this was also the state of all the great veins of the chest. The ductus arteriosus was, as usual, entirely closed.—*North American Med. and Surg. Journal.*

9. *Influence of the Male extending beyond a single Impregnation.*—A seven eighths Arabian mare, belonging to the earl of Morton, which had never been bred from before, had a mule by a quagga: subsequently she had three foals by a black Arabian horse. The two first of these are thus described: "They have the character of the Arabian breed as decidedly as can be expected where fifteen sixteenths of the blood are Arabian, and they are fine specimens of that breed; but, both in their color and in the hair of their manes, they have a striking resemblance to the quagga. Their color is bay, marked more or less like the quagga in a darker tint. Both are distinguished by the dark line along the ridge of the back, the dark stripes across the forehead, and the dark bars across the back part of the legs. Both their manes are black; that of the filly is short, stiff, and stands upright; that of the colt is long, but so stiff as to arch upwards, and to hang clear of the sides of the neck; in which circumstance it resembles that of the hybrid. This is the more remarkable, as the manes of the Arabian breed hang lank, and closer to the neck than those of most others."* Mr. Mayo, who quotes this curious fact in his excellent "Outlines of Philosophy," observes, that "a similar occurrence to the preceding

*Philos. Trans. 1821, P. 21.

is mentioned by Mr Giles, respecting a litter of pigs, which resembled in color a former litter by a wild boar. The best explanation of these phenomena is to suppose that connexion with the male produces a physical impression, not merely upon the ova which are ripe for impregnation, but upon others, likewise, that are at the time immature. In gallinaceous birds, in turkeys, for instance, it is well known that a single coitus will actually impregnate all the ova that are laid during the breeding season. The explanation which I have offered seems to me far more reasonable than any supposed influence of the imagination, the effect of which on any occasion, even in human beings, appears more than doubtful."—*Mayo's Physiology, 2d ed.* p. 489.

10. *Congenital Absence of the Iris without loss of Vision.*—The congenital absence of the iris, without loss of the sense of sight, is one of the most uncommon and singular organic anomalies. M. Rudolphi, (Grundriss der Physiologie, t. ii. part i. p. 221,) has doubted whether it has ever been observed; but we are now in possession of many facts which leave no room for incredulity. The change from the natural state to the total absence of the iris appears to be formed by congenital irregularities in the figure of the pupil. The first degree of anomaly is constituted by the oblong and perpendicular pupil, like that of the cat. Another preternatural formation consists in the division of the iris from the inferior margin of the pupil to the union of the cornea with the sclerotic coat.

Dr. Behr briefly reports all the known cases of total absence of the iris. Klinkosch, (Programma quo sect. et demonsta. indicit. Prague, 1766; Meckel, Pathol. Anat. t. i. p. 395,) first observed this anomaly, but in a case where there also existed organic malformation of the eye and the whole body. The first case of complete congenital absence of the iris, without any other complication, was communicated to the Societe du Cercle Medical de Paris, by Mr. A. Morisson, of London, (Nouveau Journ. de Med. &c. t. vi. p. 105; M. Baralta has described two eyes, in each of which the iris was wanting, (Praktische Beobacht. uber die vorzuglichsten Augenkrankheiten.) Professor Dzondi mentions a similar case, (Rust, Mag. f. d. ges. Heilkunde, t. vi. p. 33; and another is reported by Dr. Pænitz, of Dresden, (Zeitschrift fur Nat. und Heilk. t. ii. p. 214.) Lastly, M. Behr gives us the details of the following case, which he himself saw.

Caroline Schwabe, born in 1826, from the first day of her life, was so sensible to the impression of light, that she cried loudly whenever any luminous rays fell upon her eye. Her mother could perceive nothing peculiar in her eyes; but M.

Behr, upon examining them in May 1827, discovered a total absence of the irides. The eyes of the mother and father were blue, and naturally formed. The child presented no other irregular formation, excepting that the upper eyelids were thick and swollen, and the eyebrows covered with light weak hair. By degrees the infant became accustomed to light, but the eyes were always very mobile, and agitated in their orbits. The cornea was rather more convex than usual. In November, 1827, she was attacked with measles, accompanied by excessive sensibility of the eyes. September 1828, the child could direct the eyes steadfastly to any object, and the sclerotic was now seen of a bluish tint, and the large pupil of a deep black colour. When the child was placed at the extremity of a room, and rays of light were directed through the window upon the eyes, a phosphorescent redness was perceived, which gave to the eye the aspect of a luminous ruby, or of a burning coal. The visual faculty did not appear to be affected by this anomalous structure of the eyes. The child, however, seemed to be more comfortable in the weak light of the evening: she was then more cheerful and playful than at other times. She could see also in almost total darkness. The brightest colours, as red or yellow, were the most agreeable to her. If she wished to examine any minute object, she drew it very near her, and always placed it below the visual axis. It appeared painful to her to look upwards, even in a weak light. The other senses were perfect, and her hearing was remarkably acute.—*Lond. Med. and Phys. Journ. Jan.* 1830, *from Hecker's Ann. April*, 1829.

11. *On the Regeneration of Bone.*—M. Flourens read a communication to the Royal Academy of Sciences, at their meeting on the 20th July last, on the regeneration of bone. M. F. has made a number of experiments on young birds, principally pullets, and the following are the results at which he has arrived. 1st. If the external periosteum of a bone of the cranium be removed, the external lamina of this bone becomes necrossed, and is thrown off; in this case a new periosteum is first formed, afterwards a cartilage, which subsequently ossifies. 2d. If a bone of the cranium and its periosteum is removed entire, the dura mater remaining perfect, this latter membrane reproduces only the internal lamina of the bone; the external is reproduced, as in the preceding case, by a periosteum newly formed. 3d. If the periosteum, the bone, and dura mater are removed, a new periosteum and a new dura mater are first formed, afterwards a double cartilage is produced between these two membranes, which is finally converted into two osseous lamina. 4th. All bones are not susceptible of

reproduction; those which the author has seen reproduced in his experiments are, the frontal, the occipital, the parietal, and the other bones of the vault of the cranium; but the osseous envelope of the semicircular canals, and these last themselves are not reproduced. Nevertheless if a canal has been only divided, the two ends reunite after a time and are connected by a bone which at that point obliterates the cavity of the canal. M. F. gives the following account of the mechanism of this reproduction. 1st. It is always the periosteum or the dura mater which is first reproduced, and they afterwards reproduce the cartilage and the bone. 2d. It is always the old periosteum and the old dura mater, which give birth to the new periosteum and new dura mater; it is also at the borders that the new organization always commences. 3d. The new bone is never as regular in its structure as the primitive one; the two lamina of which it is composed are often confounded together, or at least are only separated by an imperfect diploe. 4th. An effusion of organizable lymph, at the border of the part which forms it, always precedes a new progress of formation.—*Archives Generales, Oct.* 1829.

12. *Instance in which Life was supported for a length of time by the Absorption of the Fluids of the Body.*—A very curious instance of life being supported by the absorption of the fluids of the body, is related by Mr. Granger, in his *Elements of General Anotomy*, as having occurred some years since at Dover. "A hog weighing one hundred and sixty pounds, was buried under a portion of the cliff, which fell on its stye, for the long space of one hundred and sixty days. At the end of this time, being dug out, it weighed only forty pounds, and was extremely emaciated, clean, and white. As there was neither food nor water in the stye, when the cliff fell, this hog must have existed during the time mentioned, by the removal of the adipose and other fluids from their containing structures into the circulating system."—*American Journal.*

13. *Loss of Sensation in one-half of the Body without Loss of the Power of Motion.*—Notwithstanding the numerous researches of modern physiologists, and the ingenious experiments they have instituted to elucidate the mechanism of the functions of the nervous system, we are still ignorant what portions of the brain are the exclusive seat of sensibility, and what determine the movements, though observations similar to the one we are about to notice, show that these faculties are entirely isolated. The following interesting case, related by Dr. Le Sauvage, of Caen, in the *Archives Generales*, for November last, affords a very remarkable example of the possibility of the loss of sensation without the locomotive faculties suffering in the slightest

degree. A man aged seventy-three, well made, habitually enjoying good health, had perceived for fifteen days some giddiness, when on the 10th of March, 1828, being about fifty steps from his house, he experienced suddenly a numbness in the whole of the left lower extremity. It appeared to him that his foot sunk deeply, and he seized his thigh with both hands, as if to prevent its sinking into the ground. Almost at the same instant, the numbness extended over the whole left side. Alarmed at this unusual condition, he became anxious to get home, and ran with facility that distance. The next day Dr. Le Sauvage was sent for, who found the patient in the following condition; the intellectual faculties natural; the pulse nearly the same in both sides of the body; he could walk, move his arms, and take hold of objects without difficulty, only the elevation to which the arm could be raised by the deltoid was a little limited; but he had no consciousness of the movements he performed, nor of the bodies he touched. The skin over the whole left side was absolutely insensible; he might be pinched and pricked on this side ever so much, without his perceiving any pain, or even without his being aware of it. At the anterior part of the body, the median line was not the precise limit of the sensible parts. On the left side, the skin possessed sensation to the extent of about an inch from this line: beyond this point there was complete insensibility on this side. On the affected side, the sight and hearing were perfectly natural, but the senses of smell and taste were lost. When the left half of the tongue was wet with strong vinegar, the patient did not taste it in the least, whilst the taste of this fluid was strongly perceived by the other half of this organ. Strong odours placed under the left nostril were not perceived, except when the patient made a strong inspiration, but then the odour passed to the right nostril through the posterior nares. When the hand was placed upon the head, the patient felt only that portion resting on the right half, &c. This affection has hitherto resisted all treatment. The constitution of the patient, however, does not appear to have suffered any injury.

14. *Intermittent Aphonia.*—A very remarkable case of this is related by M. Rennes, Professor in the Military Hospital of Instruction at Strasbourg, in the *Archives Generales*, for June last. The subject of the case was a Madame M. a brunette, of middle size, aged forty-six, married at the age of twenty, residing constantly at her country seat, at Pengord, in the midst of a wood, where the air is good, presenting nothing in her physical constitution, or in her character, which is extremely cold, that could lead to a suspicion of a predominance of her nervous system. Her regimen has always been regular; her

life tranquil; she never had any violent disease; she has had two children, the youngest is twenty-one years of age. This lady was attacked annually, from the age of thirty-three years, with aphonia. These attacks were abrupt, and came on at noon, unaccompanied at first with any local or general uneasiness. The loss of voice was sudden and complete, and lasted till midnight of the same day, when speech returned in the same rapid manner in which it was lost. This occurred every day for about three weeks, and then ceased. Three of these accessions, each of a fortnight or three weeks duration, took place in the course of the first year, 1812, and the same course obtained for a few years afterwards. In 1819, the periodicity became more regular. Each year, in the month of February, the approach of the malady was announced in the morning, by wandering pains, shiverings, and horripilations. Exactly at midday the voice became extinct, without any affection of the pulse, any sense of constriction about the throat, but only a sense of tightness and uneasiness in the epigastric region. She would go to bed at nine o'clock, and awake quite well, to go through the same process the succeeding day. Sometimes, however, there were accompanying febrile symptoms, headache, &c. but these were rare. She had no perspiration. Nevertheless these attacks diminished her strength, and caused considerable loss of flesh. She had been bled—had taken sulphate of quinine, and various other medicines, without the least effect. Of late years the duration of these attacks has varied from three to seven months every year. The attack over, she regains her embonpoint and strength, and appears as if she had never been unwell.—*American Journal.*

15. *Intermittent Aphonia of thirty years standing.*—This is related by Dr. Ollivier, of Angers, in the same journal with the preceding case. Maria Louisa Girou, midwife at the Hotel Dieu of Angers, aged forty-four, (at the period when she came under observation, 1818,) of a nervous and sanguineous temperament, delicate constitution, had menstruated regularly from the age of fifteen to that of eighteen, when she had profuse menorrhagia, occasioned by some violent mental emotions. About this period she became affected for the first time, and without any evident cause, with complete aphonia, which lasted several days. From this period the complaint came on at irregular intervals—sometimes several times in the month—sometimes with intervals of many months. She had once an immunity of a whole year. There was no apparent disturbance of the constitution at the periods of attack. They commenced with a sense of irritation in the throat, which gradually increased till the voice was totally lost, when the irritation always sub-

sided. During the period of the attack, the patient felt a sense of oppression about the region of the heart, and of heat ascending in currents to the head. In all other respects she was well, and went about her avocations as usual.

From the age of eighteen to that of forty-four years, the attacks of aphonia have always presented the same phenomena; but latterly, since menstruation has ceased, the intervals between the accessions are longer. Various remedies, chiefly of the antispasmodic and tonic kind, had been employed, without making the slightest impression on the malady. At length blood-letting was tried—and scarcely had an ounce flowed from a vein when restoration of the voice took place. This remedy has invariably produced the same effect in every subsequent attack of aphonia. Leeches gave the same relief, by the time that an ounce or two of blood was abstracted. M. Ollivier himself was witness many times of this extraordinary efficacy of bleeding. The patient felt as if a load were removed from her heart whenever the blood flowed, and then her voice was restored.

16. *Paralysis of the Muscles of one side of the Face from disease of the Portio Dura.*—Mr. Abercrombie, in his work on the brain, makes the following very interesting observations on this affection; they merit the attention of the profession. We have seen very many cases of this complaint, the pathology of which is not generally understood, and have seen one case at least in which it was rendered permanent by mal-treatment. "The important practical application of the discoveries of Mr. Bell," says Mr. Abercrombie, "is, that there may be paralysis of the muscles of one side of the face, producing distortion of the mouth with inability to shut the eye-lids, without disease of the brain, and consequently without danger. This affection depends upon a disease limited to the portio dura of the seventh nerve, and may be produced by inflammation of the ear or the parotid gland, or tumours compressing the nerve on any part of its course. The most common example of it seems to originate in a kind of rheumatic inflammation produced by cold, especially by exposure to a current of cold air, as when a person has sat long, or has slept opposite to an open window, or has sat in a carriage with a cold wind blowing on one side of his head. It is to be treated chiefly by local remedies, as topical bleeding, blistering, and the application of warm water or steam. In this manner it is often speedily removed, but in some cases proves tedious, and does not go off entirely for several months. The affection is of course still more untractable, or even permanent, when it depends upon a permanent cause, such as tumours compressing the nerve, or destruction of a por-

tion of the nerve by wounds or extensive suppurations. There is also a very formidable modification of it which depends upon disease of the temporal bone.

"The character by which these cases are distinguished from paralysis depending upon disease of the brain, consists chiefly in the sensibility of the parts remaining unimpaired. The loss of motion also is confined to the muscles of the face and eyelids, and does not affect those of the jaw. These peculiarities arise from the remarkable facts discovered by Mr. Bell, Mr. Shaw, Mr. Mayo, and others, that the portio dura of the seventh is a nerve of motion only, supplying the muscles of the face and the orbicularis of the eye, but not the muscles of the jaw; and that the sensibility of all these parts, and the motion of the muscles of the jaw are derived from the fifth, which, having a double origin, is a nerve both of sensation and motion. An important distinction, however, is to be kept in mind in regard to the paralysis of the eye-lids which occurs in these cases, namely, that it is the inability to shut the eye that arises from the affection of the portio dura of the seventh. The dropping of the upper eye-lid and inability to raise it, is a disease entirely of a different nature; it depends upon an affection of the third nerve, and consequently gives more reason to suspect disease within the head.

"When therefore we find paralysis and distortion of the face, with loss of sensation of the parts, we have reason to suspect disease within the head, the portio dura of the seventh and the fifth being both affected. But when we have the paralysis without diminution of sensation, the disease depends upon an affection of the portio dura alone, and may be entirely without danger. Such cases however are not to be treated lightly, but the cause of them ought to be carefully investigated; for if there be any reason to suspect that the affection depends upon disease of the temporal bone, it may come to be attended with danger by inflammatory action spreading inwards to the dura mater or brain. There is another modification also which requires to be watched with anxiety, namely, when the affection is accompanied with deafness; as this gives reason to believe that both portions of the seventh nerve are affected, and consequently to suspect an internal cause."

17. *Dupuytren's Method of Removing Fibrous Polypi of the Uterus.*—M. Dupuytren, instead of the method hitherto employed for the removal of uterine polypi, extirpates them in all cases with the knife. He has been led to prefer this operation, from the consideration of the fibrous nature of polypi, the facility with which by moderate but continued traction the uterus may be drawn even with the vulva, the fact that hæmorrhage is less

to be feared than is supposed, and that the difficulties arising from the deep situation of the pedicle of the tumor may be easily overcome. Besides, it is sometimes impossible to apply a ligature, either because the tumour is too deeply situated or completely fills the vagina, and even greatly distends it, so that the fingers or instrument for applying the ligature cannot be introduced; moreover the consequences of the application of the ligature are often very dangerous. The following is M. Dupuytren's mode of operating. The patient is placed on her back upon the edge of a bed, her legs and thighs flexed and fixed as for the operation of lithotomy. Very strong dressing forceps are introduced into the vagina, with which the polypus is seized hold of, if it do not project beyond the vulva; the forceps are introduced on the finger or with the aid of a speculum; in this last case their branches must be straight and the rings small, so that they can pass into the speculum, when the latter is withdrawn from the vagina, after the polypus has been seized hold of by the forceps. The surgeon then employs gradual traction to draw out the polypus, or if it already project beyond the vagina, to expose its pedicle. Sometimes a single forceps is not sufficient, the first is then confided to an assistant, who continues the tractions, and the surgeon takes hold of another part of the polypus with another pair of forceps, and thus the desired effect is produced. The pedicle being brought to the orifice of the vagina, the surgeon ascertains the size of the pedicle and whether there be in it any large arteries, the latter is ascertained by the pulsation. If there be pulsations, a ligature is to be applied above the place where it is intended to make the incision, but where no pulsations are discovered, the pedicle is to be divided with a bistoury or scissors curved on both sides. When there is no pedicle, M. Dupuytren makes around the anterior half of the base of the tumour an incision which penetrates into the mucous tissue, the sub-mucous cellular tissue, or even the proper tissue of the uterus; a similar incision is made posteriorly, the two incisions united, and the tumour dissected out. In this case the operation is more complicated, and may be more readily followed by hemorrhage, inflammation, &c. M. Paillard, who reports this method in the *Revue Medicale* for June, 1829, states that numerous successful cases attest the advantages of this operation. It may be conceived that when these tumours are soft or have degenerated so as to tear easily, that it will present obstacles to the operation, but with patience, prudence, and slow and moderate traction, M. P. says that the surgeon will eventually succeed. Experience proves, he says, that dangerous hemorrhage never occurs;

once only M. D. has been obliged to have recourse to the tampon, which readily arrested the hemorrhage.

18. *Extirpation of the Uterus.*—In our last, at p. 225, we gave some details of this operation as performed by M. RECAMIER, in July last, at the Hotel Dieu. Examination of the removed organ confirmed the diagnosis established by accurate investigation of the pelvis before the operation, and proved that all the diseased tissues were removed—a point essential to success. From the *Archives Generales* for October, we learn that M. ROUX has since performed two similar operations, the details of which are given. In the *first*, the patient was 55 years of age, and had a cancer of the neck of the uterus, and after a careful examination by MM. RECAMIER, DUPUYTREN and ROUX, the ablation of the uterus was regarded as the only chance of safety for the female. It was accordingly performed by M. ROUX on the 20th of September last at 9, A. M., in the manner indicated in our last number. In this case, tumours on the anterior part of the neck of the uterus, rendered the separation from the bladder tedious and difficult ; and, after the ligatures were applied to the lateral ligaments, prevented the antiversion and descent of the organ, until part of the perineum was divided. Very little blood was lost. The operation lasted half an hour.

"The patient was much exhausted, pulse frequent and very feeble ; in half an hour there was some reaction, which was assisted by warm drinks and chicken water. In the evening the abdomen became painful ; six leeches were applied to the hypogastrium ; they were suffered to bleed but little, in consequence of the weakness of the pulse and the general pallor. The patient remained in a state of stupor, from which she could not be roused ; death occurred on the 21st at 6, P. M."

*Necropsy.*—The pelvis contained 2 oz. of serosity ; no evidence of peritonitis or any other inflammation. The left ovary was soft, and transformed into an encephaloid substance. On the right there were numerous encephaloid tumours more advanced. The posterior surface of the bladder presented a round opening, at least four lines in diameter.

In the *second* case, the patient, aged 38 years, was admitted into La Charite on the 25th of August last, with a severe cancerous disease of the uterus. After many examinations by experienced surgeons, M. ROUX operated on the morning of the 25th of September.

In this case also, the antiversion of the uterus was executed with great difficulty, and gave rise to severe hemorrhage. The right ligature broke and was not replaced. The operation lasted near thirty minutes, and the patient suffered much.

Immediately after the operation, the patient was pale, cold; the pulse small, frequent and threadlike, and there was a slight scarlet coloured hemorrhage per vaginam. No reaction ensued; some tonics were administered, but ineffectually; and death occurred on the 26th, at 10, A. M.

*Post Mortem.* The pelvic cavity was found to contain a small quantity of blood; the serous membrane was of a rose colour, and the subjacent cellular tissue was already becoming friable. The bladder, rectum, and other viscera were sound. The left ligature was found embracing exactly the broad ligament at its inferior part. On the right side, the exact source of the hemorrage could not be discovered.

In the *Journ. Gen.* for October, the cases of RECAMIER and ROUX are given with all the necessary details, and the learned editor, M. GENDRIN, has compiled a history of all the cases in which the uterus has been extirpated, where there had been no prolapsus or retroversion of the organ. In Germany, although frequently proposed, and made the subject of special investigation, extirpation of the uterus in situ has been performed but once, and that in 1821, by M. SAUTER, physician at Constance. The patient recovered from the effects of the operation, but died of a cancerous disease. In England it has been executed six times; four times by Mr. BLUNDELL, once by Mr. BANNER, of Liverpool, and once by Mr. LIZARS. One of Mr. BLUNDELL's succeeded; the result of Mr. LIZARR's is yet unknown.

In France it has been performed three times, as already detailed.

Of these ten operations, the result of one is unknown; three patients of the remaining nine recovered; and of these, one has since died of a return of the cancerous affection. In all there was immediate and great depression of the vital powers; and in no case has there been any hemorrhage sufficient to cause the fatal result. Those that died, have perished during the two first days, not from inflammation, but from prostration. In two cases, one of SAUTER's and one of ROUX's, the bladder was opened during the operation. M. GENDRIN proposes a new method of operating, which he thinks would be superior to those given. But we have no room for further details.

This severe and dangerous operation of extirpating the uterus in situ, would seem at present hardly justifiable, except in cases not only favorable in themselves, where all the diseased structure can be removed, and the patient's health not too much impaired, but where the patient *solicits the attempt.* We doubt the *morality* of placing life in such immediate and imminent danger, even for the chance of ridding the patient of a

disease fatal in its tendency, but which in most cases but slowly undermines the powers of the system. More force is imparted to this observation when we reflect on the uncertainty of the diagnosis as respects the extent, and even the nature of the disease, and the worse than useless attempt at extirpation, when adjacent tissues are also involved, as occurred in one of the above recorded cases. Fortunately, in America, the opportunity for such operations is rare, and we may safely and quietly wait the result of European experience, which promises to be extensive.—*N. A. Medical and Surgical Journal.*

19. *Croup in an Adult.*—So comparatively unfrequent is the croup in adults, that many have erroneously supposed it to be a disease confined entirely to children. At the session of the Royal Academy of Medicine, September 22, 1829, however, M. Tonnele, internal student of the Hospital for Children at Paris, read, in the name of M Desormeaux, a well marked case of croup in a married woman. It is stated that towards the close of her pregnancy, she was attacked with a pseudo-membranous angina. Delivery took place during the disease; the infant was perfectly healthy, and has so continued. The mother, however, died; and, on opening the body the membranous exudation peculiar to croup was found in the larynx and trachea; The lungs were in a state of engorgement, and the bronchiæ were the seat of intense inflammation.

20. *Wax as an application to Ulcers.*—The application of wax to old ulcerated legs has been practised in the Westminster Hospital, with great success, within the last few months. In every instance it has rapidly improved the character of the sore, and brought on a disposition to skin over, and in the greater number of cases the ulcers have healed in a much shorter time than could have been calculated with the ordinary applications—indeed it has succeeded often when all the usual dressings had been tried and failed.

21. *Tinea Capitis.*—There are perhaps few practitioners who have not been occasionally foiled in their attempts to cure this disease. The stimulating ointments and applications usually recommended, we have found very frequently to fail in affording relief, and not unfrequently they aggravate the mischief. We have been most successful with the physiological practice—treating the disease like other inflammations, with leeches, and then applying a poultice of flaxseed mucilage to the scalp, covering it with an oil-silk cap. After all inflammation has been subdued by these means, a moderately stimulating ointment may sometimes be found useful. In the last number of the *Edinburgh Medical and Surgical Journal*, Dr. M'Fadzen recommends a lotion of the acetate of lead, which Dr. Macart-

ney also says will cure the eruption. The only thing to be feared, says Dr. M'F. is its being healed too suddenly. The following case, in which the remedy was successfully employed is given. A boy, aged eleven, of a flabby habit, and subject to a cough, has been labouring for some years under *Tinea Capitis*, or the *Porrigo scutulata* of Dr. Bateman, which has resisted all the common remedies, both local and constitutional, not only under my own care, but by the advice of others. The head having been shaved and well washed with soap and water, which exposed a number of inflamed irritable patches, covering about half of the hairy scalp, I dressed the head according to Professor Macartney's plan, namely, covering the diseased scalp with charpie dipped in a solution of the acetate of lead, (gr. iij. ad ozi. Aq.) and applying over all a well-fitted oiled silk cap, leaving directions to wash the lint three times a day in cold water, in order to free it from the secretions of the skin, reapplying it to the head, wetted with the medicated lotion. He has called upon me this day, (July 26th,) when I was happy to find him nearly cured, the inflamed and irritable patches having been replaced by a comparatively healthy skin. No constitutional treatment whatever was resorted to.

22. *Case of Fracture and Depression of the Inner Table of the Cranium by a musket ball, the External Table being uninjured.*—The following singular and interesting case, which occurred in the practice of Staff-surgeon Cooper, is related by Dr. HENNEN, in his Military Surgery. The patient was struck at the battle of Waterloo, with a musket ball, on the right parietal bone, which was exposed, and had no appearance of being fractured; as, however, the symptoms of compression were urgent, and the patient was nearly in a lifeless state, Mr. Cooper conceived it right to apply the trephine to the part on which the violence had acted. He had not sawn long before the external table came away in the hollow of the trephine, leaving the inner table behind, which was not only splintered, but driven at one point more than half an inch into the membranes and substance of the brain. No sooner were the fragments taken out with a pair of forceps, than the man instantly sat up in his bed, looked around, and began to speak with the utmost rationality. It is a most extraordinary fact, that this patient got up and dressed himself the same day, without leave from the medical officers, and never had a bad symptom afterwards.

28. *Dislocation of the Clavicle forwards.—Reduction at the Expiration of Twelve Weeks.*—A man aged 50, fell with his arm outstretched in such a manner that it bore the whole brunt of the violence. Inability to raise the arm as before, and "an *intense dull swelling*, which after a time became almost imper-

ceptible from the enormous degree of tumefaction which ensued," were the consequences of the accident. No attempt at reduction was made, and twelve weeks after the occurrence of the accident he entered the Winchester Hospital under the care of Mr. Lyford. On the superior part of the sternum was a distinct obtuse projection, exquisitely sensible when touched, and attended with slight inflammation of the integuments; this projection could readily be traced as a continuation and termination of the clavicle, though the motions of the shoulder appeared to produce no alteration in its situation. The motions in question were painful; the shoulder itself had a decided inclination forwards, and the distance between its point and the mesial line of the sternum, was shorter, on admeasurement, than in the opposite extremity.

"The treatment consisted in the application of the clavicle-bandage with pads under the axilla. The shoulders were drawn backwards, as far as they could be, which was not, however, to the fullest extent, the patient having acquired, from his agricultural pursuits, a somewhat prominent back, so that the bases of the scapulæ were farther asunder than natural. The effect of the bandage was not that of restoring the dislocated extremity of the clavicle immediately into its proper receptacle on the sternum. This object was accomplished, in the most gradual manner, by tightening the bandage every four or five days, until the scapulæ were completely approximated. The patient was confined in bed for three weeks on his back, which greatly assisted the bandage in its office of retaining the shoulders in the wished for position. Moderate pressure was made by the application of soap-plaster on the dislocated parts; and, at the expiration of a month, the parts had acquired their original and natural situations."—*Med. Chirug. Rev. Jan.* 1830, *from the Provincial Medical Gazette, No.* 11.

24. *Nicotin, the active principle of Tobacco.*—We derive the following statements from the *Archives Generales* for November last, which refers to *Geiger's Magazin fur Pharmacie* of December 1828. MM. Posselt and Reimann have described a new vegetable alkali in tobacco, for which they propose the name of *nicotin*, but which we should preferably designate by that of *nicotia*.

The process by which they obtained the new principle is sufficiently simple. They boiled twelve pounds of tobacco leaves in water acidulated with sulphuric acid, evaporated the filtered decoction by a gentle heat, and treated the residue with alcohol. The tincture was then distilled so as to separate the pure alcohol; and the aqueous residuum, after the addition of hydrate of lime was submitted to a new distillation. To the

product thus obtained ether was added, the mixture was well shaken, and the ether then distilled off: another portion of ether was added, which was also distilled; and the process was repeated till the residuum ceased to present an acrid taste. The several portions of ether which came over were mixed, and treated with chloride of calcium: and the anhydrous ethereal solution thus procured was distilled by means of a salt water bath. The result of this operation was the nicotin. The authors procured two drachms of this alkaline principle from the 12 lbs. of tobacco which they employed.

Pure nicotin is liquid at about 21deg. of Fahrenheit. It is transparent, of a reddish brown colour, and of a pungent odour similar to that of dry tobacco. The smell is rendered more penetrating in proportion to the elevation of temperature. Its taste is extremely acrid and burning, and remains long upon the tongue. When dropped upon paper it produces a greasy stain, which, however, completely disappears in the space of two hours. It is volatilized upon exposure to the air, leaving a slight residue of resinous matter. It boils at 474deg. F., rises in white vapours when heated to near the boiling point of water, and takes fire upon the application of a lighted match. It is heavier than water.

Nicotin is soluble in water in all proportions, and its solution presents manifest signs of alkalinity.—*N. A. Med. & Sur. Jour.*

25. *Jalap the product of an Ipomœa.*—The question whether the true jalap plant is a convolvulus or ipomœa seems now to be settled. Professor Coxe, of the University of Pennsylvania, having procured from Xalapa a number of the plants in a growing state, placed them in his garden, and succeeded with great care in bringing them to such perfection, as to authorize a decision upon their botanical character. He has no hesitation in pronouncing the plant to be an ipomœa, and is supported in his decision by the opinion of Mr. Nuttall, one of the first botanists of this country. A paper by Dr. Coxe, upon the subject, is contained in the American Journal of the Medical Sciences for February last.

26. *Strychnia in Paralysis.*—It appears from the experiments of Desportes, Magendie, Delile, Orfila, and others, that the nux vomica does not occasion any organic lesion in the animal frame, though it has a direct action upon the nervous system, causing death from asphyxia produced by the immobility of the chest during the violence of the tetanic spasms of the thoracic and abdominal muscles. Frouquier was led to make trial of the strychnia in several cases of paralysis of the lower extremities, and published his successful results in that disease; and many others have employed the remedy with various, if not

doubtful issues. Dr. BARDSLEY details 23 cases of paralysis treated with strychnine, and gives a tabular view of twelve more. We shall glance at some of these in a condensed form.

*Case* 1. A female aged 30, had entirely lost the power of the left side, with diminished sensibility, occasional head-ache and vertigo—articulation impaired—urine and fæces passed involuntarily—face drawn a little to one side—pulse feeble at 86—countenance pallid. The attack had occurred three months previously, shortly after parturition, and had gradually increased. Attributed the complaint to cold and over fatigue when far advanced in pregnancy. Leeches, blisters, and aperients having been premised, the strychnine was exhibited in doses of the twelfth part of a grain twice a day, and afterwards increased in frequency and quantity. It was more than three weeks before she began to feel the influence of the medicine in slight pricklings of the paralyzed limbs. The sensation began to revive—smart convulsive twichings occurred—motion improved—she had some command over the bladder and rectum—and finally recovered completely. The strychine amounted to a grain twice a day, before the cure was effected. The appetite was much improved during its exhibition.

*Case* 2. This was a man aged 31 years, who, after being troubled with pain in the head for some months, lost the entire power of the lower extremities, their sensibility remaining unimpaired. The power over the sphincters was also lost—the flesh was reduced—the complaint of three month's duration and the cause ascribed to fatigue and cold. Cupping and purging having been premised, the strychnine was exhibited, beginning with the fourth part of a grain three times a day, and gradually increasing the dose to half a grain three times a day, when convulsive twitchings were much complained of, but un accompanied by vertigo or other distressing symptoms. The dose was ultimately augmented to double the above quantity, but severe pain at the scrobiculus cordis was the consequence, with violent spasmodic action of the muscles of the thorax and lower extremities, requiring powerful stimulants. Long and repeated trials were made of the medicine, but no benefit whatever was derived from its administration, and the patient was ultimately discharged uncured. The next case we shall quote in the words of the author.

" *Case* 3. SAMUEL OGDEN, aged 46, admitted 21st June, 1824. He has been paralytic for more than four months, having lost the entire power of the limbs of the right half of the body; and the muscles of that side have not recovered their former bulk and plumpness. He has been addicted to great irregularities in his general mode of living. Complains of pain

in front of the head accompanied by vertigo. Speech rather inarticulate. Memory slightly impaired. Urine and fæces are both involuntarily and unconsciously discharged. Appetite indifferent. Pulse feeble. Countenance somewhat sunk. Six leeches were ordered to each temple, and a blister to the nape of the neck. To take three ounces of the Mistura Sennæ Composita immediately, and to repeat the dose every three hours until the bowels have been freely evacuated. 23d. Head relieved by leeches and blister. Several copious stools procured by a second dose of the purging mixture. To commence with one-twelfth of a grain of strychnia in the form of a pill twice a day. 26th. No effect having been produced, dose increased to one-sixth of a grain. Purging draught to be given on alternate mornings. 29th. Only effect of the medicine is an occasional sensation of heat along the spine. Dose increased to one-fourth of a grain, three times a day. 4th, July. Slight convulsive twitchings of the paralyzed members. More feeling in the bladder and rectum. Half a grain twice a day. 7th July. Slight tetanic symptoms after each dose. Some power over the affected muscles. Half a grain three times a day having produced vertigo, stupor, pain at scrobiculus cordis, irregular convulsive startings both of the sound and affected limbs, tending to syncope, weak pulse, and extreme debility. It was again reduced to twice a day. This dose was continued until the first of August. The patient having improved progressively, until the functions of the bladder and rectum were restored, and he could walk from one end of the large ward to the other, he was discharged.

*Case* 4. This was a spinner, aged 29 years, who, six months previously was seized with loss of power in the lower extremities after bathing whilst the body was much heated with exercise. At the time of admission he was incapable of motion without the aid of crutches, and passed his urine and fæces involuntarily. The spine was free from pain—strength much reduced—appetite bad. The strychnine, in the dose of one-sixth of a grain three times a day, was exhibited, and augmented to a quarter of a grain every four hours, when severe convulsive twitchings took place in the affected limbs. In less than a month he became capable of retaining both his urine and fæces, and of walking from one end of the ward to the other by the aid of a small stick. He was entirely cured.

*Case* 5. Sarah Hilton, aged 36 years, was admitted on the 7th September. This woman had suddenly lost the power of the right side of the body. The attack was preceded by severe pain at the crown of the head, drowsiness, faulty articulation

&c. The intellectual faculties were impaired, as was the power over the sphincters. She was ordered five grains of calomel, followed by a saline aperient, which were repeated, and then the strychnine was exhibited, in the dose of a quarter of a grain every six hours. This was gradually increased till violent twitchings of the paralytic parts ensued, attended by nausea and dyspnœa. These symptoms were relieved by plenty of brandy and water. The medicine was soon afterwards resumed and continued. The power of motion in the paralyzed parts soon began to return—the amendment was rapid—and in about seven weeks the cure was complete.

Passing over a case or two, we shall extract the following without abbreviation.

*Case* 6. Robert Hobson, 38 years of age, finisher, admitted an in-patient, October 6, 1827.

"This is a case of paraplegia, the patient having lost the power over the inferior extremities, rectum, and bladder. He states that he first perceived about four months ago a weakness in his legs, rendering it necessary for him to use considerable effort to drag them along. This debility gradually increased, until at length he became altogether incapable of moving the lower limbs. He has no feeling in them. Head free from pain or giddiness. Pulse regular, appetite impaired. Being desirous of putting the *individual* efficacy of the strychnia to the test, I commenced with the exhibition of the alkali in the proportion of a sixth of a grain twice daily, without previously employing internal or local remedies of any kind. October 10th. No change. Dose to be increased to the fourth of a grain three times in the day. 20th. He considers himself better, having obtained a slight command over the sphincters of the bladder and rectum. On the 14th, he first experienced involuntary twitchings in the inferior extremities, which have been continued at intervals up to the present time. To take half a grain of the alkali twice daily. 28th. He is in excellent spirits, owing to the benefit he has derived from the pills. He can raise the lower limbs to some height from the bed, and also retain at pleasure both his urine and fæces. During the last week, the twitchings have been rather severe, but not painfully so. He is very desirous of persevering with the pills. To continue. November 7th. Since the last report, the patient has been allowed to sit up for several hours during the day. He is surprisingly improved, being able to walk without the aid of a stick from one end of the long ward to the other. Appetite good. Bowels regular. Warmth and sensibility of inferior extremities natural. Half grain pill to be taken three times

daily. 26th. The additional half grain excited for some days powerful twitching in the legs and thighs, but in the course of a week or less they became not more severe than was occasioned by half a grain of the alkali taken twice in the day. He is now capable of walking as well as at any former period of his life, and his general health is excellent. It is impossible to describe the gratitude which this patient felt for his restoration to health. He was ordered to be discharged *cured* at the first meeting of the weekly board."

Our author next states the effects of the strychnia in thirteen cases of paralysis; but, in order to avoid tiresome details of history, he merely mentions the age of the patient, duration of the disease, time of admission, dose of alkali employed, length of time it was continued, and the result. This abbreviation we shall here introduce, as it harmonizes with our own plan of brevity.

"*Case* 11. August 4th, 1825, ELIZABETH TAYLOR, aged 38.

"Has been paralytic on the right side for two months. Attack sudden, accompanied with pain in the head. To commence with the eighth of a grain of strychnia twice daily. Gradually increased to half a grain twice in the day. Continued this dose for three months. Discharged cured.

"*Case* 12. September 2d, 1825, SARAH WHYATT, aged 53.

"Ill six months. Hemiplegia of right side. Fourth of a grain of strychnia to be taken twice daily. Increased to half a grain, at the same intervals. Continued for four months. Discharged relieved.

"*Case* 13. October 4th, 1825, WILLIAM JOHNSON, aged 16.

"Paraplegia of six weeks standing. Cause of disease unknown. Sixth of a grain of alkali to be taken twice in the day. Increased to the fourth of a grain. Persevered in its use for two months. Discharged cured.

"*Case* 14. December 30th, 1825, THOMAS GRIFFITHS, aged 61.

"About two months ago was seized with hemiplegia of the left side. Former habits intemperate. Head painful. Ten leeches to be applied to temples. Pain in the head removed by leeches. Sixth of a grain of strychnia to be given twice in the day. Increased to half a grain. Continued three months. Discharged relieved.

"*Case* 15. January 4th, 1826, ANN LLOYD, aged 42.

"Has been paralytic on the left side for more than six months. Commenced with the eighth of a grain of alkali. Increased to

half a grain three times daily. Continued four months. Discharged cured.

"*Case* 16. January 15th, 1826, THOMAS NOTT, aged 50.

"Hemiplegia of left side. Experienced the attack about twelve months ago. Sixth of a grain of strychnia to be taken each morning and evening. Increased to a grain and a half during the day. Persevered in the use of the remedy with great regularity for three months. Discharged much relieved.

"*Case* 17. April 2d, 1826, THOMAS OGDEN, aged 40.

"Has laboured under paralysis of right side for two months. To commence with the sixth of a grain of alkali twice in the day. Increased to half a grain. Continued two months. Discharged cured.

"*Case* 18. September 3d, 1826, JOHN LEVERS, aged 46.

"Paraplegia of three month's continuance, induced by a severe fall upon the sacrum. Sixth of a grain of strychnia twice daily. Increased to half a grain. Remained in the hospital two months. Discharged cured.

"*Case* 19. August 19th, 1826, MARY GRADY, aged 62.

"Lost the power of right side four months ago. Fourth of a grain of alkali twice daily. Increased to half a grain. Three months trial of the medicine. Discharged relieved.

"*Case* 20. October 6th, 1826, WILLIAM SICKSMITH, aged 39.

"Paralytic on right side five months. Fourth of a grain of strychnia twice daily. Increased to a grain and a half in the course of a day. Discharged cured in less than ten weeks from the time of admission.*

"*Case* 21. December 28th, 1826, —— JONES, aged 33.

"Lost power of right arm about year and a half ago. Eighth of a grain of strychnia three times in the day. Gradually increased to half a grain twice daily. Two months trial of alkali. Discharged cured.

"*Case* 22. February 4th, 1827, JAMES WILSON, aged 29.

"Attacked suddenly in March last with paraplegia after exposure to wet and cold. Dose of strychnia to be increased from sixth of a grain to half a grain twice daily. Used this remedy for one month. Discharged cured.

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* "This man since experienced an attack of paraplegia, and is now using the strychnia (at his own request) with advantage. March 10th, 1828."

"*Case* 23. November 4th, 1827, JAMES TURNER, 42 years of age.

"Has laboured under hemiplegia of left side for five weeks. Commenced with the sixth of a grain twice daily. Dose increased to half a grain. Remained two months in the hospital. Discharged cured.

"The following table will also shew the results of the exhibition of strychnia in *twelve* more cases of paralysis.

| No. | Names. | Age. | Duration of complaint. | Disease. | Result. |
|---|---|---|---|---|---|
| 24 | James Faris, I. P.* | 28 | 3 months. | Hemiplegia of the left side. | Cured. |
| 25 | Charles Walker, I. P. | 44 | 6 months. | Ditto. | Much relieved. |
| 26 | Robert Ashton, H. P. | 54 | 2 years. | Paraplegia. | Slightly relieved. |
| 27 | Margaret Lewis, O. P. | 17 | 2 months. | Ditto. | Cured. |
| 28 | Denis Hagan, H. P. | 44 | 6 weeks. | Hemiplegia of the right side. | Much relieved. |
| 29 | Henry Black, I. P. | 23 | 3 weeks. | Paraplegia from a fall | Cured. |
| 30 | John Allensworth, O. P. | 62 | 12 months. | Hemiplegia of ri't side. | No benefit. |
| 31 | Isabella Gale, I. P. | 33 | 3 months. | Ditto. | Left the house |
| 32 | David Davis, H. P. | 51 | 3 months. | Hemiplegia of the left side. | Much relieved |
| 33 | James Shaw, H. P. | 19 | 4 weeks. | Paraplegia from cold. | Cured. |
| 34 | Owen Morris, O. P. | 54 | 7 months. | Hemiplegia of l'ft side. | Relieved. |
| 35 | Jacob Long, O. P. | 49 | 12 months. | Paraplegia. | Cured. |

### OBSERVATIONS.

Our author thinks and we agree with him, that the foregoing recital is sufficient to prove that strychnia excites a very powerful influence on the system, and that it is entitled to rank as a valuable remedy in the materia medica. It was employed in some cases without benefit, in others with partial advantage—but, in the majority, with complete success. Hence, he conceives, it may justly be considered an *efficacious*, though not a certain remedy in this affection. When cerebral disorganiza-

* "The abbreviations, I. P., H. P., and O. P., denote in-patients, ome-patients, and out-patients."

tion has once taken place, it is, of course, in vain to expect a cure from any medicine. "It is in such cases of paralysis as seem to arise from diminished nervous excitement, that the strychnia is particularly indicated."

"It may be stated here, as a rule of guidance, that whenever hemiplegia supervenes to an apoplectic seizure in persons of a plethoric habit, it is proper to employ bleeding, purging and the ordinary antiphlogistic treatment, before resorting to the use of the strychnia. When the vessels of the head have been freely unloaded, and the quantity and force of the circulating fluid diminished by the above means, there can be little objection to a *cautious* and prudent trial of this remedy. Generally speaking, the strychnia is likely to prove more serviceable in paraplegia, unconnected with spinal disease, than in hemiplegia; though I feel confident, that it will not unfrequently be found an important remedial agent even in hemiplegiac paralysis." 39.

Dr. B. has not tried the strychnine on children, nor would he advise the attempt. The first effects of the medicine in every case, were convulsive twitchings of the paralytic members, and no benefit was derived until this condition of the parts had been produced and continued for some time.—This appears to have been the case with iodine in the hands of that very intelligent and candid physician, Dr. Manson. In Dr. Alderson's experiments, too, with the rhus toxicodendron in paralysis, twitchings and tinglings in the paralytic members appear to have been the first steps towards recovery.—Strychnia does not appear to impair the energy of the stomach, but is rather serviceable in promoting appetite and digestion. Dr. B. recommends the practitioner to commence with not more than the eighth of a grain of strychnine twice in the 24 hours, which quantity is to be gradually increased to a sixth, fourth, or even a half a grain at the same intervals. Any unpleasant symptoms should be the signal for suspending the remedy for a time, when it is to be renewed in slowly augmented doses. "By attention to these points (says our author) although no benefit may accrue from the strychnine, we may be sure that no injury will attend its exhibition." He generally gave it in a pill, with a little conserve of roses.

II. *Strychnia in Chronic Diarrhœa.* Numerous instances of chronic diarrhœa occur among the out-patients of the Manchester Infirmary, some of which obstinately resist every kind of treatment. Under such circumstances, our author was induced to try the strychnia, "and proved a *safe* and *effectual* remedy."

To shew the foundation for this assertion Dr. B. has detailed several cases in illustration. Since he had prepared those pages for the press, he finds that Recamier had also exhibited the alcoholic extract of nux vomica with complete success. Dr. Rummel has also employed strychnia with advantage in chronic blennorrhœa of the rectum.

In his remarks on the cases detailed Dr. B. observes that he does not consider the strychnia a suitable remedy in those instances of diarrhœa which depend upon an evident inflammation of the mucous membrane of the intestines. He particularly recommends the medicine in cases of a *chronic kind*, occurring in persons somewhat advanced in life, and of feeble constitution.

Dr. B. has appended several cases of paralysis treated by brucia an alkali obtained also from the nux vomica, and weaker than the strychnine in the proportion of one to twelve. Ten cases are selected from among others, to show the powers of the brucia. His experience leads him to recommend it as a valuable remedy in paralysis—the action being analogous to that of strychnine, but less powerful—"hence," says he, "it is a preferable remedy in paralytic attacks, accompanied with much cerebral disturbance." It is prudent to commence with the dose of a grain twice a day, which is to be cautiously increased to two grains three or four times a day. Unless a marked advantage accrue from the administration of the remedy in the course of five or six weeks, it ought to be laid aside.—*Medico Chirurgical Rev.*

27. *Cataracts alternating with Diabetes.* (*Winchester county Hospital Reports, in Prov. Med. Gaz. No.* 11.)

The following is a very singular case, and one that would be met with incredulity, were it not guaranteed as it is, by the name of the surgeon and of the hospital.

Eliza Broomfield, æt. 15, remarkably tall and thin, was admitted with cataract in either eye. The pupils were dilated to their utmost, and the crystalline lens were evidently so augmented in bulk as to protrude through the pupillary opening; its colour was uniformly milky; the cornea unusually glassy; the vision so completely lost that the patient could only distinguish most imperfectly light from darkness. Independent of the cataracts, there were dyspnœa, cough, and loss of appetite.

The cataracts had appeared simultaneously fourteen months previous to her admission, and had been completely formed in the surprisingly short period of twenty days. The menses had appeared at the age of eleven, and had flowed with regularity till her thirteenth year, when they disappeared. From having

been healthy and robust, she now became very debilitated, increased most astonishingly in stature, and subsequently was attacked with profuse nocturnal perspiration. When twelve months had elapsed an evident amendment took place ; but it proved to be temporary only, and very shortly afterwards the girl began to complain of uneasiness about the head, with vertigo, confusion, and obscurity of vision.

R. Infus. gent, c. ozj. Spt. æth nit. ozss. Tr. camph. c. ozss. ter die sumend. Pil. hyd. gr. ij. omni nocte sumend.

These medicines were continued for upwards of a fortnight with considerable benefit, and on the 20th of February we find that, though the cough was nearly gone, the dyspnœa and appetite were worse. The dilatation of the pupils, bulging, and milky whiteness of each lens were diminished, and the patient could readily detect any substance interposed between her and the light from the window. The medicines were repeated with the addition of an aperient. On the 24th she could discern the flame of a candle at some little distance, but it was now discovered that the urine was too abundant.

" Feb. 28th.—The quantity of urine passsed for the last four days has averaged sixteens pint daily. Its colour is of a greenish yellow, and its taste strongly mellitic. Pulse 65, and feeble ; appetite natural ; dyspnœa not diminished ; the emaciation very considerable ; tongue morbidly clean ; skin dry and scurfy. The cataracts are rapidly disappearing. In a few days the sight was perfectly restored. By a diet of animal food and suitable medicines, the urine was reduced, by the 25th March, to two pints, natural in respect to colour and taste. The sole complaint appeared to be extreme debility, and the patient having recovered her sight returned to her friends. The following account was given by a relative who visited the hospital once a fortnight as an out patient, and was subsequently confirmed by the testimony of the mother of the patient.

" From her narrative, it appears that almost immediately (about four days) after the young woman had returned home, she began to experience a relapse of uneasiness about the head, accompanied with great obscurity of vision, which increased with such rapidity, that before a week had elapsed, she was in a state of utter darkness. To this pitiable condition succeeded her diabetic symptoms, but in a more aggravated form than in her previous attack, together with rapid emaciation and overpowering debility. The quantity of urine evacuated for several days prior to her decease averaged at twenty pints per diem ; but with the accession of these symptoms there was a complete restoration of the natural functions of the eye, which she retained most perfectly to the last moments of her exist-

ence. Her death took place four weeks after the return of the diabetes. There had been no post-mortem examination.—*Medico-Chirurgical Review.*

28. *Infanticide.*—We find an interesting memoir on this subject in the *Journ. Gen. de Med.* for November 1829, by J. B. F. Hennequin. It is entitled *Medico-Legal Questions relating to Infanticide.* The interest always attached to this subject induces us to present the article nearly entire to our readers.

A female, R——, accused of infanticide, says, in reply to the questions put to her, at one time, that the child of which she had been delivered had been dead in her womb several days before its expulsion; at another time, that this child died after its birth, in consequence of loss of blood from the umbilical cord, which she was unable to tie, on account of her weakness and fainting away; and that even had she preserved her senses, she would not have tied it, not knowing that such a precaution was necessary.

There being no document at the trial, not even the account of the examination of the body of the infant, performed by the health officer, which furnished suitable data or satisfactory evidence of either of the allegations of the accused, the judge of the second arrondissement of the department of Ardennes put the following questions, to which he wished to have circumstantial answers:

Second Question.—*By what signs are we able to ascertain whether a child has come into the world alive? And what are the signs of the death of a child in the womb of its mother?*

Answer.—The first part of this question is equally delicate and important: its solution, in order to be positive and free from cavil, ought to rest entirely on an examination of the thorax, lungs, heart, interauricular foramen, the canalis arteriosus, the canalis venosus, the umbilical cord, and the diaphragm.

To live and to breathe are synonymous terms. If the child has not lived, there is no cause for suspicion. Life and respiration being inseparable, whatever in the body of the newly born child shows that respiration has been performed, becomes in itself a proof of life after birth. We may then admit that a child has breathed, and consequently that it came into the world alive, whenever the chest is augmented in size, and changed in form; so that from flat, as it was, it has become arched; when the lungs fill completely the cavity of the chest, and invest almost the entire pericardium; when their colour, of a deep red before breathing, has become clearer, and more or less pale; when the pulmonary cells are filled with air, and give to the organ an emphysematous character; when the lungs, or portions of them, put into a deep vessel, filled with

clear and cold water, swim ; when the interauricular foramen is nearly closed ; when the arterial and venous canals are shrunk or obliterated ; when the diaphragm is flattened, &c.

If, after having settled these various points of the respiratory test, we ascertain that the child has reached its full term ; that no diseased condition of the lungs or other viscera exists, susceptible of influencing its vital energies ; that the body presents none or scarcely any of the marks of putrefaction ; that the umbilical cord is shrunk, and there are evidences of the urinary or fœcal excretions having taken place, we are justified in concluding that the child came into the world alive.

As to the signs of the death of the fœtus in the maternal womb, the object of the second part of the second question, they are little more than problematical. The absence of the apparent signs of the child being alive in the womb, does not always prove that it is so, in so positive a manner as to put us beyond the reach of error. In order to arrive at something like certainty on this point, we must class together all the signs of fætal death.

For greater clearness and precision, we must first consider the signs which indicate the death of the child in the still occluded uterus, and then lay down those of a more evident nature, presented by the inspection of the body after birth. In general these signs will be found confirmatory of each other.

The signs, indicative of the death of the child in the uterus, are commemorative, general and particular.

The commemorative signs are all those which apprize us of the causes which could give rise to the death, of which some depend on the mother, and others on the child.

The causes peculiar to the mother are internal or moral, such as great paroxysms of anger, great fright, or chagrin, in fine, all the violent passions ; and external or physical, such as falls, strains, blows on the loins or abdomen, the use of emmenagogue remedies, or of substances to procure abortion ; alarming diseases, such as the phlegmasiæ, convulsions, great hemorrhages.

The causes of the death of the child in the maternal womb, peculiar to itself, are too obscure for us to attempt their enumeration.

The general signs are those which experience has sanctioned as indicative of the death of the fœtus before delivery ; such are the cessation of all movements of the womb, after extraordinary agitation ; an uneasy weight to the mother ; pain in the loins ; the abdomen hanging or falling to the right or left side, according to the attitude taken by the woman ; the uterus in these different movements follows the inclination of the body ; it alone changes its position, without the abdomen also inclining

to the recumbent side ; when the mother complains of no longer feeling her child move about, the accoucheur by having recourse to the *toucher* at different times, cannot discover any movement, and the uterus descending, compresses the parts which surround it, so that walking becomes difficult for the mother, who believes that the child is dead, and says that it has fallen down ; should delivery be retarded, she complains of many distresses, is seized with fever, &c.

These general signs would not constitute a certain prognosis of the death of the child in the uterus, if we did not add to them the particular or special signs by which the proof is made complete.

The particular signs are manifested during labour ; they are more or less evident according to the period of the death, whether for a length of time, or immediately before delivery. In the first case, we see the waters of the amnios turbid, holding meconium, and having a fetid odour ; a discharge of fetid fluid for a varying length of time ; the bones of the cranium moveable, and the cutaneous tissue which covers them, livid, flabby, and easily detached ; want of heat and pulsation in the umbilical cord. But we can only judge of this last when the cord is external, or when it forms a turn across the orifice of the uterus.

In the second case, that is, when death has only preceded delivery by a short time, there is no sign of putrefaction of the waters, nor of the skin, but we remark that at the moment in which the head presents at the superior strait, the skin of the cranium does not form the swelling or puffiness which we meet with when it is living ; the umbilical arteries are destitute of heat and pulsation, which we ascertain by touching the cord.

All these signs ought to be presented collectively, in order to form a complete proof, otherwise they will not be sufficient to enable us to give a certain prognosis.

The sensible signs presented by the inspection of the body are of a much greater weight. Collectively, they indicate, beyond doubt, the death of the infant in its maternal womb. The pulmonary test practised, as above indicated, might alone suffice to lead us to a definitive judgment. Hence, if we find the thorax narrow, contracted, flattened ; the lungs shrunk and dense, and no longer covering the pericardium ; if they be of a deep red, and, when put into a deep vessel of pure cool water, sink ; if the interauricular foramen, and the canalis arteriosus be free and well open ; the umbilical vessels shrunk up ; the bladder filled with urine, and the intestines with meconium, we have undoubted proofs that the child has not respired, and, consequently, that it was dead before delivery. The case is still

more evident, when the body of the child exhibits marks of putrefaction, exhales a cadaverous odour, allows of the epidermis to be detached, and when the colour of the skin, and especially of that of the abdomen is changed and livid, &c. though the body have been but a short time exposed to the contact of the external air.

It is in the sum of the circumstances just detailed, that the physician must seek for proofs of the death of the fœtus in the maternal womb. To pretend to decide the question after a small number of symptoms, would be evidently exposing one's self to serious mistakes.

THIRD QUESTION. *Does a neglect to tie the umbilical cord necessarily occasion the death of the new born child by the loss of blood?*

1. The ligature of the umbilical cord is not in every case indispensable. When the circumstances are favourable, it may remain united, without our having to fear any hemorrhage; but we are not, on this account, to conclude that it is always superfluous, since examples are not wanting in which a fatal loss of blood has been the consequences of omitting to perform the operation.

3. Individual circumstances render the ligature of the umbilical cord more or less necessary; hemorrhage is more to be dreaded in a feeble than a robust child; in one who has cried and respired, than in one who is still in a contrary state.

If we cannot positively aver the absolute necessity of the ligature of the umbilical cord, or that the omission of it shall necessarily bring on a fatal hemorrhage, we may say that this precaution is always a good one. and that children, in the case of whom it was neglected, would not be exempt from danger, a fact which very few women are, or ought to be ignorant of, unless they bear a child for the first time.

FOURTH QUESTION. *If the death of the child have been caused in consequence of omitting to tie the umbilical cord, by what signs are we to ascertain whether the hemorrhage which ensued was the cause of its death?*

ANSWER. The authors above cited will also furnish all the materials for this reply. The signs characteristic of the death of a child, after loss of blood, are a pale colour of the whole surface of the body, similar to that presented by wax; paleness of the viscera, discoloration of the muscles; want of blood in the arteries and large veins, and in the auricles and ventricles of the heart, especially in the anterior or right auricle. To these circumstances let us add those which apprize us of the infant's having lived. But we are not to conclude from these signs that there has been umbilical hemorrhage, unless there have existed no other lesion capable of causing a loss of blood,

and we see that the body of the child is perfectly well formed, and the umbilical cord neither shrivelled up nor dry, which last would denote that blood had not been supplied to the child in sufficient quantity when it was in the womb of its mother.

We ought to be aware, that even though every thing should prove umbilical hemorrhage, we are not, therefore, to infer an act of criminal premeditation; the effusion of blood might have been occasioned during the progress of labour, either by too precipitate a detachment of the placenta, or by a laceration of the umbilical cord, especially after a sudden expulsion of the child, and the mother have so fallen into a swoon.—*N. A. Med. and Surg. Journal.*

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## II. Analytical.

1. *Excision of the Elbow Joint.*—This operation has lately been twice performed by Mr. Jas. Syme, of the Edinburgh Surgical Hospital. Both patients laboured under well marked caries of the joint. In the first patient, a young woman aged 25, the cure was delayed by a chronic bronchitis. She left the Hospital considerably better in this respect than when she entered, and with a prospect of retaining a useful arm.

The boy, aged 9, was a very favorable subject for the operation. After sawing off the humerus, and cutting away with the pliers, the olecranon and head of the radius, the cut extremity of the olecranon was found to be carious. Having ascertained the depth of the caries by means of a probe, the ulna was separated from its connexions as far as was necessary, and cut across. The whole spongy portion of the bone was then removed, although with some difficulty, owing to the connexion of the brachiæ us internus. Although the biceps was the only muscle whose connections were undisturbed, yet in five weeks he began to recover the motion of the arm which was nearly as moveable as ever. As the students found it difficult to conceive how the use of the muscles could be recovered, Mr. S. shewed them a young clergyman, upon whom he had operated some years before, who could not only write sermons, but execute all the ordinary motions of the arm.—*Medico Chirurgical Rev.*

2. *Case of Carotid Aneurism where the Artery was taken up above the Tumour.*—In the last number of this journal we took notice of the successful performance of this operation by Dr.

Mott. The Medico Chirurgical Review contains an account of another successful operation by A. Montgomery, Surgeon to the Civil Govnt. Hosp. at Mauritius.

The subject of this very formidable disease was a free black, aged about 40 years, a creole of this colony, and was employed as a gent d'armes ; tall, of a square habit of body, and rather given to intemperance. Was admitted into the Civil Government Hospital (of which I am surgeon in charge) on the 20th February of the present year, for an aneurismal tumour the size of a pullet's egg, situated immediately above the sternal portion of the left clavicle, and so close to that bone, that it seemed to emerge from behind it, or rather from within the cavity of the chest ; which rendered the taking up of the common carotid artery below the aneurism absolutely impracticable.

The poor man had an almost constant tickling cough, with severe pain of the trachea ; copious frothy mucous expectoration ; great anxiety of countenance ; hoarseness of vioce ; disturbed sleep ; and was rather emaciated from constant watching.

From this period the tumour went on increasingly rapid until 9th March, when it had acquired an alarming size, the base occupying the space of two-thirds of the sternal portion of the clavicle, and ascending nearly four inches upwards to the angle of the jaw, so that the volume of the tumour limited exceedingly the space for taking up the artery above it. An incision was made of an inch and a quarter long through the integments and platysma myoides muscle, by which the inner edge of the sterno cleido mastoideus was brought into view, greatly thrown inward and forward out of its natural position. This being drawn aside by a retractor, the incision was continued on its inner side in the direction of the carotid artery with every possible caution to avoid the superficial veins, one of which, of considerable size, crossed the neck, limiting very much my space for operating. The after part of the operation was attempted with a silver knife, as directed by Mr. Wardrop, but finding that instrument too clumsy, and depending on the steadiness of my hand, I removed the cellular substance, and exposed the sheath of the vessels, by dissecting with the forceps and scalpel, occasionally using the handle of the latter, when I found it necessary. This dissection exposed the descendens noni running on the front of the sheath of the vessels, the bifurcation of the artery, the external jugular vein at the upper angle of the incision, and a vein the size of a large crow quill crossing the artery at the lower angle, and immediately above the omohyoaideus muscle, which limited the place for taking up the artery to little more than half an inch. The sheath of the vessel was now slit open, when the artery, vein, and par vagum nerve, were seen in their natural situations.

The patient who had been very restless during the whole of the operation, suddenly raised himself up so that I was compelled to seek again for the sheath, and being unable to find the first opening, I was obliged to make a second one. An attempt was now made to pass a

rude crooked aneurisnal needle armed with a double ligature around the artery, in which I was foiled by the restless state of the patient. A second attempt proved more successful, as it passed with facility. On the ligature being laid hold of, the needle was withdrawn and on one ligature being secured the other was removed and the wound brought in contact by a simple suture and strap of adhesive plaster. The patient being now faint a little wine and water was given and he was put to bed. It is remarkable that scarcely a drop of blood was lost during the operation (which was performed in about 25 minutes) except what escaped from the vessels, of the integuments and platysma myoides, which did not exceed a tea-spoonful.

By the 14th of March the tumour was diminished to half its size the pulsation only to be observed when the patient lay in a recumbent posture. And the condition of the patient in other respects much improved. 18th. The tumour still smaller but a pulsation perceptible at a small point on the humeral edge of the aneurism indicative of approaching rupture of the sac. 20th, Slight hemorrhage from the wound, which, except where the legature comes out, is entirely healed ; pulsation at the point mentioned on the 18th more distinct. The hemorrhage recurred on the 22d several times in the course of the day, but was on every occasion easily commanded.

April 7th, The tumour painful. From this time it gradually enlarged and threatened to suppurate. And, on May 29th, it gave way and discharged about 8 oz. of fetid chocolate colored fluid. No hemorrhage having taken place, it was enlarged on the next day, and about 6 or 8 oz. more of the same fluid discharged. The artery could now be felt at the bottom of the wound, without pulsation. June 8th, The patient begins to walk out, the wound is nearly healed, and the tumour has entirely disappeared.

3. *Observations on the treatment of Delerium Tremens, and on the use of the warm bath in that disease.* By T. H. Wright, M. D. Physician to the Balt. Alms-house.

The treatment, antecedent to the Spring of 1827, in cases complicated with gastric and bibrary derangement, or with much febrile excitement, consisted in the administration of emetics, and afterward, of mild cathartics followed by anodynes graduated in force and repetition, by the amount or obstinacy

of the nervous excitement. In some cases of high vascular excitement, the solution of tartar emetic was employed as a nauseant, concurrently with the anodynes. Where sensorial and nervous irritability were greatly exalted, all evacuants were omitted, and the opiate immediately resorted to, but the doses were here made smaller, than where the vital power was less deficient, and in some severe cases of this kind, they were assisted by venous or spiritous potations.

The form of the opiate was sometimes an object of considerable importance. Dovers powder would appear calculated to meet several indications. But independent of its being objectionable from its nauseating properties, it frequently appeared to conduce less to sleep, than the same amount of pure opium. The principal reliance was pure dry opium, the older the better, if well kept. Experience however has taught the advantage of varying the preparation. In one case where sixteen grains of opium has been given in twelve hours without the slightest relief, fifteen drops of black drop procured sleep, in thirty minutes, which lasted fourteen hours.

The sedative powers of the web of the black spider have been fairly tested, and for the most part with partial or doubtful success. In one case, attended with great restlessness, and mental excitement, and with constant loco-motion, in which opium, opium and camphor, the black drop had been given, until the amount approached the utmost limit of safe administration, the web was given on the morning of the third day, 5 grs. every hour. Its effects were prompt and unequivocal. The patient calmed, sensibly to himself, with every dose, and anxiously watched the hour of its repetition. By evening he was so far composed as to consent to lie down, and with the assistance of an opiate, slept continuously for eight hours. The cure was completed by diminished doses of the same medicine on the next day, quiet, suitable nourishment, and an anodyne repeated in the evening.

Hitherto these means had been uniformly successful, but three cases which terminated unsuccessfully in the spring of 1829, tended to weaken the reporters confidence in this mode

of treatment, and induced him to look out for some auxiliary, that might enable them to dispense with such large doses of opium. Emetics and mild cathartics were still administered if necessary, and in some cases cupping to the epigastrium, temples, &c. were resorted to as preliminary measures. The warm bath was next used, its temperature regulated by the state of the patient, as a general rule about 90, and its duration to be determined by its effects; always contemplating manifest calming influence.

After the bath, opium (or some of its preparations in the proportion of one grain to the dose) was given every two hours, repeated if necessary to the extent of three or at most four doses. If this did not succeed, the warm bath was repeated and the patient kept in it until sensibly relaxed. The opiate was then renewed in doses of half a grain, repeated every hour until sleep was produced.

Dr. W. speaks with great confidence of the use of the warm bath, and remarks, that after its repetition, the reduced doses frequently manifested a greater composing effect than the full doses did before. The students of the institution at length adopted the practice of giving the opiate in small doses, at the commencement, and continuing them until the end was accomplished. The dose now prescribed is ten drops of laudanum at intervals of 40 or 60 minutes, rarely increased, whatever may be the result, to 20 drops. Cases have occurred in which the excitement has continued for two or three days, and at length happily yielded to this course. The bath is generally very agreeable to the feelings of the patient, and they are anxious for its repetition.

Dr. W. is very much opposed to unnecessary restraint, being convinced that it frequently tends to protract the delirious excitement. In confirmation of this view, he relates one protracted case, in which the patient consented to lie if the restraint was removed, and was reported to have fallen asleep in a few minutes. Experience has therefore suggested to him the propriety of the physicians contenting himself, with removing out of the patients way every thing with which he could injure

himself, and in severe cases confining him by a leg chain, to a small space near the bed. The opiate is generally exhibited in wine whey, which is also allowed as a drink, unless contra indicated by the grade of excitement. Spirituous drink of all kind is excluded from the plan of treatment.

The following remarks, upon a subject in which every friend of humanity feels a lively concern, will not be read without interest.

When first entering on hospital practice, where the temulent form of disorder was likely to be frequently encountered, it became a question with me whether I might safely withhold spirituous drink from the subjects of that affection betraying a predisposition to the disease in its mature stage, namely, prepared to lapse into agitative delirium. The experiment seemed both morally and medically worth making, if it could be done with safety. It was tried and succeeded. With very rare exceptions, liquor, spirits, wine, &c. was kept wholly out of use, and the temulent subject treated by rest, (sometimes confinement to bed for a day or two,) with sufficient allowance of light nutritious food, and generally a small anodyne at night. I have seen no reason to consider this course unsafe, or calculated to give temulent irritation occasion or opportunity of serious aggravation. Very many who come into the wards with bodies agitated and minds somewhat distempered by temulence, on being put to bed, made warm and comfortable, supplied with suitable and sufficient nourishment, and, if required, a medicinal cordial or anodyne, have tranquillized readily, and escaped the further dominion or the full establishment of the disorder. On the whole, I am sincerely convinced that the administration of spirituous drink is not generally necessary or beneficial in temulence, either as a preventive or remedial mean.

On the subject of the medicinal employment of spirituous liquors in general hospital practice, our experience sustains a conclusion of some interest, especially as it relates to the moral and economical aspect of hospital regimen. Our annual summary of cases treated, for twelve months, ending 1st of May, 1828, gives 1873 patients. A similar estimate for the year ending 1st of May, 1829, furnishes 2167 cases. By a report of the agent of supplies for the Alms-house, the whole quantity of liquors ordered for the institution during those two years, was as follows :—

"For the year ending 1st of May, 1828, 50 gallons of wine, 3 barrels of whiskey, 8 gallons of Jamaica spirits, 1 gallon of gin, 1 dozen bottles of porter. For the year ending 1st of May, 1829, 48 gallons of wine, 2 barrels of whiskey, 7 gallons of gin, 6 gallons of spirits, 2 gallons of French brandy.

"T. H. HAND, *Agent.*"

The "whiskey" mentioned in the report of the agent, was used for various purposes, in the house, chiefly stimulant fomentations, liniments, &c. and for making common tinctures. None of it was administered to patients, except as made into tinctures. There remains then, of wine, spirits, brandy, &c. a total of one hundred and twenty-eight gallons used in two years, with an aggregate of patients in the time amounting to four thousand and forty. In a professional view, the first question which ought to associate itself with such an exhibit, is whether the subjects and diseases of hospital practice will safely admit so restricted employment of stimulant means. If my judgment and experience have not both greatly deceived me, I can conscientiously answer in the affirmative. My real conviction is, that what error we committed in the use of those agents was on the side of indulgence rather than restriction—that we gave too much instead of too little. The total mortality in the institution, for the two years indicated, was 322, number of cases 4040, ratio of deaths about twelve and a half per cent. A result it is conceived not less favourable than has obtained in any similar establishment abroad or at home. The ratio of mortality here given, will be greatly reduced in a medical contemplation, by the fact that the aggregate of deaths reported comprehends one hundred and two cases of pneumo tuberculitis, or chronic phthisis pulmonalis.

*Baltimore, December*, 1829.

As the reported is disposed to congratulate himself, very justly we think, upon the success of his practice we will remark that success is greater than he has himself represented it, 322 out of 4040 being eight instead twelve and a half per cent.

5. *Observations on Hematosis, with two cases in which this function was imperfectly performed.*—By Samuel Jackson, M. D. Adjunct Professor of the Ins. and Prac. of Medicine, in the University of Pennsylvania.

Entertaining for the talents and acquirements of Dr. Jackson, feelings of the most profound respect, and still retaining a grateful recollection of his polite and communicative disposition towards the students of the Philadelphia Alms House, we cannot read, without deep regret, remarks like the following.

The secreted humours appear at this time to attract the entire attention of a large body of practitioners, whose sole object is to expel them from the bowels, and, like Purgon, *nettoyer les corps et en evacuer entierement les mauvaises humeurs* The whole practice of physic may be comprised, according to this system, in the universal prescription, with one alteration, of Argan, in the laughable satire of Moliere on the profession :—

*Calomelas donare,*
*Postea seignare,*
*Ensuita purgare,*
*Reseignare, repurgare, et recalomesare.*

Of infinitely more importance is it to appreciate and determine the state of the mucous surface of the primæ viæ and appendant organs, the immediate cause of the secretions, than to occupy the attention with the secretions themselves. These are much more harmless than is supposed. Nature finds but little difficulty in getting rid of them. The product of a certain condition of the secreting surface, they bear most generally a relation to that condition, whether it be natural or pathological, and when the two are in the same relationship, the secretions, however morbid, cannot react injuriously on the organs. But far otherwise is the case with the means employed to expel these morbid secretions. They are seldom in relation with the surface on which they act. Their action too is not in antagonism with the pathological state, but is of the same order—and it is not possible beforehand to pronounce positively that the therapeutic malady will supplant the pathological ; that it will not act in the same line of march with the diseased action, and thus press it on in its destructive tendency. There are other means of equal potency, and of perfect safety, in changing the actions of the solids or organs, and thus effectually restoring the secretions to a healthy order. These for their simplicity, are despised by the PURGONS of medicine, who, ignorant of their mode of operation and of action, cannot conceive, that means which do not convulse the organs by their perturbating powers, can operate a salutary influence. This notion is of equal accuracy with that, which would attribute to nature no other remedy for the impurities of the atmosphere than a tornado or hurricane.

To what class of practitioners does the writer intend to apply these remarks ? Where are these PURGONS to be found, who (to use the author's very classical expression) "*cannot conceive that means* which do not *convulse the organs by their perturbating powers* can *operate a salutary influence.*" Unqualified and unfounded abuse of this kind can serve, but to degrade the profession, and give some support to the ranting of the miserable charlatans that are [illegible] such numbers about the West, overspreading the [illegible] the frogs of Egypt, and thrusting their disgusting [illegible] every man's bed chamber. The Doctor has assumed a principle which yet remains to be proved, viz : that this class of remedies is not "in antagonism with the pathological state, but is of the same order." There are many reasons for supposing that most purgative medicines,

in their first impression upon the surface to which they are applied, are direct counterstimulants, and that they do not increase the peristaltic motion by stimulating the mucous surface. It is therefore entirely gratuitous to say that *the therapeutic malady supplants the pathological.* Gentlemen who deal largely in sarcasm should be very certain of the grounds upon which they stand.

In addition, we will simply remark that medicine, in common with the other branches of science, has long been burdened by modes of expression, drawn from absurd and unintelligible hypotheses, oppressive to the student and revolting to literary readers. With the progress of literature and science, good taste and more correct views have been gradually removing this evil ; but the progress of Medicine, for a variety of reasons, has been slower in this respect than that of her sister Sciences. There is no subject, upon which society in general speculate so much, and know so little, as upon the subject of medicine. The whole science is founded upon observation. The modus operandi of medicines, and the proximate causes of disease are so far involved in obscurity that physicians, when called upon for reasons, can only offer the results of experience. The inquisitive disposition of the public, however, cannot be satisfied without a rationale for every thing ; and hence, a strong temptation to mountebanks and innovators, to impose upon their curiosity by substituting obscure and unintelligible modes of expression for a frank avowal of the limited extent of professional attainment. Men of candor and correct views cannot stoop to this imposition, and therefore, frequently compete to great disadvantage, with men who are, in every respect, their inferiors.

It is no small discredit to the opinions of Broussais, that his objections to the established practice are founded upon *a priori* reasoning, and that to sustain these positions, his followers have been compelled to revive speculations and modes of expression which, the good taste and good sense of the profession have long since rendered obsolete ; and if his opinions are true, it is at least a subject of regret, that they are too often couched in terms which are intelligible only, to the ear of the initiated.

Medical writers will find the English language sufficiently copious, without the introduction of phrases which violate its idiom. We certainly think therefore, although with the utmost deference to the opinions of others, that such expressions as, "medicines in relation with the surfaces upon which they act;" "in antagonism with the pathological state;" "convulse the organs by their perturbating powers;" "operate a salutary influence," should be most carefully avoided; and especially by men whose writings are likely to be considered as models of imitation, by the younger members of the profession.

The object of the paper is to place before the public a malady of not unfrequent occurrence in Dr. Jackson's practice in which the prominent symptom is a sudden dimunition, amounting almost to a disappearance of the hematosine or colouring matter of the blood.

*Case* 1. Miss M'C——, aged 19, lymphatic temperament, hair light brown, eyes a light grey, complexion fair, full embonpoint, limbs, round and smooth, chest expanded.

The patient had heretofore enjoyed uniform good health.—In November 1829, having exerted herself much more than usual and taken very little rest for three nights she was very much overcome with fatigue. From this time she began to notice that slight exercise produced unusual fatigue and excited palpitations of the heart, and a throbbing obvious to the eye above the sternum and on the right side of the neck, with a sense of beating in the head and through the limbs.

As these symptoms increased so as to prevent all active exertion the Doctor was requested to visit her, and saw her on January 4th 1830. As she had been perfectly quiet nothing could be observed but slight throbbing above the sternum and right clavicle. The chest when examined by the stethescope gave healthy indications in every part, except that the impulse of the heart was rather louder and stronger than usual, but not to an extent that indicated any morbid or organic change. The appetite was excellent, and diet too full, digestion perfect, bowels regular, evacuations natural. The tongue was clean and

moist, and as well the gums, lips and inside of the mouth, was without colour.

The fact of the patient not having sustained any loss of blood seemed to forbid the suspicion of anemia. Dr. J. was inclined to suspect aneurism. And a consulting physician having concurred in this opinion, VS. was directed on the 10th January with a reduced diet. All the symptoms having been aggravated by this course and the blood consisting almost entirely of serum, he came to the conclusion that the case was one of anemia, or what is nearly of the same nature, a deficiency of the fibrine and hematosine of the blood. Phosphas ferri gr. 5. sulph. quinæ ss. every four hours; diet more generous. Under this treatment the patient gradually recovered, the colour returned to the lips, tongue and cheeks, the complexion resumed its healthy aspect and by the 10th February her health was perfectly restored.

*Case* 2. Mrs. W——, aged twenty, of temperament very similar to the last, was married in the winter of 1828–29, her health since that time has been imperfect, though never sufficiently ill to require medical attendance. Became pregnant and was confined after an easy labor in the second week of February 1830. On the third day, she complained of an incessant noise in the head which entirely prevented sleep, alternating with pain, for which she was bled, leeched and cupped in the head, and the bowels freely evacuated by purgatives, without benefit.

February 21st. Dr. J. saw her in consultation. The alternation of the pain and distressing noise in the head still continues, hearing very acute, sleeplessness, skin of the natural temperature, of a death-like paleness; tongue large, moist and colourless; lips equally pale; pulse large, full but without strength; stomach composed, and bowels without tenderness; blood drawn for the relief of the head, presented a small, loose coagulum floating in a large quantity of serum. This having given no relief, blisters were applied to the ancles, and an anodyne portion administered every two hours. February 22d, Some sleep was procured, head less distressed; a mild tonic prescribed. Evening, solution sulp. morphiæ. 23d, Night had

been very much disturbed, nervous agitation, delirium, pulse 160, head very hot, feet cold. Hair cut close, cold constantly applied ; warmth to the feet. This treatment produced some relief, but the unpleasant symptoms were again superinduced by a resort to mild stimulants, and the case became further complicated by epigastric distress, with thirst, diarrhea and inflammation of the vulva. A blister was applied to the epigastrium, fomentations to the vulva ; and as the mildest tonics, and opiates in their least objectionable form, deranged the stomach, all internal stimulants were abandoned, and the sulp. morphiæ and sulp. quinæ were applied to the blistered surfaces. The symptoms improved very gradually. On the 20th March phosphas ferri, grs. v. sulp. quinæ 1-4 gr. were prescribed four times a day, and on the 30th, the patient could walk a little with assistance, the lips had more colour but were still unnaturally pale. From this time she gradually recovered.

From these cases Dr. J. draws several important inferences. The strong disposition to inflammation, entirely prohibited the use of internal stimulants, at a time when the state of the vascular system entirely precluded all evacuating measures. The application of cold to the head, with the repulsive action of blisters, sinapisms and heat to the extremities, kept the cerebral excitement in check, and eventually subdued it. There was no intermission to the cold applications for ten days. They were so grateful to the patient that she would not suffer them to be discontinued. This case affords a striking instance of the occasional importance of the endermic application of medicine. The sulp. quinæ in the present instance, besides fulfilling its general indications, gave vigour to the capillary circulation, and thus served to control the internal irritation, or in the words of Dr. J. "constituted a powerful revulsive or controlling power, antagonizing the morbid irritations of the internal dermoid tissue or mucous membranes." This case further proves that redness is not essential to inflammation, and that the intensity of the colour is not in proportion to the activity of the inflammation. Hence when the colouring matter of the blood is deficient, as it frequently

is in the highly lymphatic temperament, the colour of the inflamed surface after death will afford no indication of the extent of the previous morbid irritation. In this case no difference was to be observed between the colour of the sound and blistered skin.

Dr. J. thinks that the remedies principally indicated are, "the chalybeate and more permanent vegetable tonics, introduced into the organism in a manner not to interfere with the digestive organs, when in an irritated state. The tonic and diffusive excitement of the mild mercurial preparations, gradually introduced, to avoid a pathological disturbance, are also of great utility in restoring the healthy condition of the blood."

*American Journal of the Med. Sci.*—J. C. F.

6. *Extraordinary case of Pregnancy in which the Fœtus was discharged through the abdominal parietes.* *By* Joseph A. Toy, M. D. *of Virginia.*

On the morning of the 1st November, 1828, Dr. T. was requested to see a lady in the county of Warwick, who was represented to have been in labor three days; the waters having been discharged on the evening before. She was found suffering extremely with a dull heavy pain across the abdomen. The abdomen was swelled, tense and hot—pulse small and quick—great restlessness and anxiety—os tincœ soft and somewhat dilated—the external parts swelled and inflamed. Emollient fomentations were applied, and the secale cor. was given, one-tenth of a grain every twenty minutes, until 2 drams were administered, a sudorific anodyne being conjoined with the first dose. No effect was produced by the sec. cor. The pain subsided, and the febrile symptoms were relieved by the fomentations. No fœtus could be discovered per vaginam, but a tumour resembling a child's head could be distinctly felt, in the abdomen near the navel. Her health suffered severely until the 12th, when a very offensive discharge from the vagina appeared.

Dr. T. saw her again in January, 1829. No physician had seen her for several weeks; the discharge continued, and with-

in the last three weeks, several small bones were discharged, which were found to be an entire fore arm and hand, and the metacarpal bones and fingers of the opposite arms. She was feeble, cachectic, and edæmatous. These symptoms were very much relieved by a tonic course of treatment.

On the 7th May, Dr, T. saw her again. Six or seven weeks before, a small discoloured spot had appeared near the navel, and she suffered considerable pain in this part. In this place a slight aperture existed, into which a fine probe could be introduced and from which a small discharge issued. The discharge per vaginam had ceased. On the 6th of July, the opening being closed, an incision was made and the probe when introduced came in contact with bone. Her health now gave way rapidly—hectic fever with irregular exacerbations every day, uneasiness over the whole abdomen, great emaciation and debility. On the 12th of August she reluctantly submitted to an operation, which had been repeatedly urged for several months, as the only mode of relieving her. Dr. T. assisted by Banks, performed the operation.

The aperture had increased in size considerably, being about two lines in diameter at the surface. I made the first incision about four inches long, in the direction of the linea alba, commencing two inches above the umbilicus, and one inch to the right of it. This was continued through the parietes of the abdomen and uterus into the cavity of the latter, the incision in the uterus being more than two inches in length. This incision I crossed in its centre, by another at right angles with it of equal length and depth. The top of the cranium was found presenting, the bones appearing to be very firmly united.

I attempted to introduce a pair of small obstetrical forceps, with the view of removing the head at once. This, however, was found to be impracticable without using more force than I judged prudent, as the uterus was firmly and rigidly contracted around it. I used therefore, a pair of strong forceps from a pocket case, and with these succeeded in detaching and removing the bones of the cranium separately and successively ; all the other bones of the fœtus remaining. We found that adhesive inflammation had united the uterus to the parietes of the abdomen for some distance around the opening, the diameter of the circle of adhesion was more than an inch. The operation occupied about fifteen minutes. After repeatedly washing the part, the edges of the wound were brought together, and dressed with adhesive plaster. Stitches were found unnecessary. Over this, pledgets of

lint and a compress of old linen were applied, and a roller passed round the abdomen. Before the wound was dressed the lady expressed herself entirely relieved from the uneasiness which the presence of the bones had so long occasioned. She complained of some pain about the uterus.

On our visit the the next day, she was in all respects doing well. The pain which she complained of the preceding day had continued for some hours, but she was now entirely easy, and expressed in strong terms the relief which she had felt since the removal of the bones.

In six weeks she was entirely well, and had visited several of her neighbours. The opening which had existed previous to the operation was not entirely filled up, but the incisions united by the first intention.

I saw this lady in December last—she was then in fine health and very fleshy. The catamenial discharge had returned and was now regular.

This case could not have been one of extra-uterine conception, for the early history of the case together with the discharge of the soft parts and bones per vaginam, prove incontestibly that it was uterine, even if the operation had not demonstrated the fact. Neither can it be believed that there had been rupture of the uterus at any period during the progress of this case, for when the bones were removed they were firmly enclosed in the uterus, and there was no other opening but the passage externally, for which we think there is little difficulty in accounting. The pressure of the bones against the walls of the uterus, produced inflammation and snppuration, which, passing by continuity of surface to the parietes of the abdomen occasioned the aperture. The inflammation thus exeited also produced adhesion between the uterus and abdominal parietes, which union must still exist—indeed, when I last examined her, the parietes of the abdomen were considerbly drawn in by this attachment.

*American Journal of the Med. Sci.*

7. *Extirpation of the inverted uterus, by* WILLISON HUGHEY, M. D. *of Pittsburgh.*

In the third number of the *Baltimore Journal of Medicine and Surgery*, a case is related of the extirpation of this organ, under perhaps the only circumstances which can render the operation justifiable.

Dr. H. was called on the 6th of June to see a woman aged 39, wore down from a protracted illness of 10 years. She was at this time, represented to be laboring under profuse menorrhagia, and when he saw her, was so debilitated by the discharge that she fainted on the slightest exertion. The most active

diffusible stimulants were conceived to be necessary, and were accordingly prescribed. On the next morning she was much better, and for the first time informed him that ten years before, a midwife, in rash attempts to remove the placenta, had inverted the uterus. For fifteen or twenty days after this she had been confined to her bed, from weakness and the inconvenience of the protrusion, but the organ slowly diminished in bulk, and she was able to get about, eventually with less inconvenience than might have been expected. During lactation the uterus remained free from disease, and after she weaned her child she menstruated regularly. In a short time, however, the organ enlarged and took on a diseased appearance.

When Dr. H. saw her it had, near the cervix, a pale red appearance without inflammation, but near the fundus it was highly inflamed, tense and unyielding, with several fissures and deep ragged ulcers interspersed, effusing a dark ichorous fluid, and very offensive. Near the fundus were several black spots, indicating a disposition to slough. For the next three days, in spite of the remedial measures, the disease advanced and the sloughing extended, giving rise to a renewal of the hemorrhage, when Dr. H. determined upon removing the entire organ.

Having placed my patient in the most advantageous situation, I carried a strong waxed ligature under the cervix uteri, brought the extremities together on the anterior surface, and cast a slack knot, so as to admit of its being moved up the vagina, on the included substance. I then took hold of the extremities of the ligature with my right hand, and with the left, passed my ligature as high as was possible on account of the inverted portion of the vagina. The ligature being placed where I intended it should remain, was tightened and secured with three knots ; this step in the operation occasioned exceeding pain ; so great was the torture which she suffered for twenty minutes, that I thought I shonld have been obliged to remove the cord, although I tied it as tight as possible. For a short time subsequent to the operation, I repented seriously the expedient which I had adopted ; although my patient had taken upwards of one hundred drops of laudanum, yet I was apprehensive that spasm would supervene and carry her off ; but fortunately the pain abated, and left her perfectly easy. The operation being performed, and the patient relieved from pain, I recommended quietness with a continuance of the tonic plan as before directed.

The patient, in six weeks after the operation, was sufficiently recovered to walk the distance of a mile, and soon recovered her health and spirits. More than a year subsequent she died of some other disease.—*Balt. Jour. of Medicine and Surgery.*

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## Original.

1. *Patience and Experience*, versus *Temerity and Ignorance.*—Early on the morning of the 22d, I was roused from bed by a gentleman, who begged me instantly to accompany him, with my *instruments*, for that his wife was in labour, dangerously ill, and the practitioner in attendance was desirous of my immediate assistance.

I accordingly hastened to *arm* myself, and go to the relief of the sufferer. On my way thither, I learned that one of the eminent *Steam* practitioners was the *Accoucheur*, who had been in attendance at intervals for two days, and could do no more.

On entering the apartment of the patient, I found her surrounded by six or seven of her female friends, all of whom were in distress and perturbation, anticipating consequences which neither the appearance nor actual state of the woman warranted. I inquired of the gentleman in attendance, what was the state of the labour, and what the presentation? He answered that the head of the child was low down, and the presentation *natural, the face downwards.* On examination, I found the os tincæ dilated to almost the diameter of a dollar, rather rigid, the membranes not as yet ruptured, very little tense; and through them perceived the vertex presenting above the superior strait, apparently in the first position of Baudeloque.

Under these circumstances, it is plain, that there was neither necessity for, nor possibility of, the application of forceps; and as the strength of the patient, notwithstanding some medicaments to *keep up her heat*, was not much exhausted, I advised quiet and *patience*, assuring the distressed husband, that the labour was likely to terminate in a few hours favorably both to the mother and child.

My professional engagements requiring me to leave the interesting sufferer, I went away, after promising to see her again as soon as possible. But in my absence, which was probably an hour, great alarm was again excited ; the husband was sent, post haste, to my dwelling, after me, but not finding me at home, ran to two or three places before he found a physician. I had however returned before the physician arrived, who was my respected friend Dr. Rives, whom the poor distressed husband had urged to give help immediately, for his wife was dying.

An explanation of matters soon induced Dr. Rives to withdraw, which indeed his business made him desirous to do, and on inquiry, I found all parties needlessly alarmed. Prescribing another dose of patience, I seated myself by her, discovered the os tincæ much more relaxed, and two or three strong pains ruptured the membranes. After witnessing three or four powerful throes, to make little impression on the head of the child, I *ventured* to propose *venæsection !* which, after some demur on the part of the patient, was consented to. I accordingly detracted about 16 ounces of blood from the arm ; in consequence of which the pains operated efficiently and in about an hour afterwards I delivered her—neither by *forceps*, nor *crotchet* nor *fillet*—of a fine boy, and saw the grateful patient comfortably placed in bed.

On visiting her, next day, I found the mother and infant well.

EDWIN A. ATLEY.

Cincinnati, June, 1830.

2. *Plurality of Fœtuses in the Mare.*—It is well known that duplicate births from animals of this genus are very rare, and that three are almost never produced. Dr. W. Lindsey has informed us of an instance of the latter kind. Two of the colts were nearly of the usual size, the other was destitute of hair and not larger than a cat, but in good preservation, and possessing distinctly the lineaments of the horse. The parent animal died, probably from protracted parturition, arising from the deformity of one of the colts. Dr. L. was not acquainted with the circumstances, sufficiently early to enable him to investigate

the subject, so completely as he wished ; but he concludes very justly, in our estimation, that this case furnishes a very strong objection to the cases brought forward in favor of the doctrine of superfœtation. He is himself able to vouch for the fact that, in this instance, there was no opportunity for superfœtation, and indeed the well known habits of the animal would forbid the idea. The fœtus, from its size and appearance, must have died at an early period of gestation, and consequently, the gravid uterus, while the process of gestation is still going on, must sometimes have the power of arresting the progress of putrefaction in a fœtus, that may accidently die during the early months of pregnancy. This principle, if established, may prove of some importance, by affording a solution to facts that have hitherto greatly puzzled the profession.

The case was further remarkable as an instance of protracted gestation. Linneus has given 290 days as the period of gestation in this species. In the present instance, it was protracted to 355 days—65 days beyond the usual term. F.

3. *Dry Gangrene.*—The novelty of the case of Dry Gangrene, reported by Dr. Lindsey, in the present number of this Journal, (page 28,) induced us to write to him for some more definite information, particularly whether the symptoms of Dry Gangrene extended to the ulcers on the sacrum and hip. In reply we received the following communication. F.

"Richmond, June 7, 1830.

"Dear Sir—With regard to the ulcers reported in my case as occurring on the sacrum, I am at a loss to say whether symptoms of Dry Gangrene were fully developed or not. On the hip I was more particular in marking the rise and progress of the ulcers than in those of the sacrum. The circumstance of the ulcerative process coming on in the hip without any previous inflammation, might be owing to the extreme exhaustion of the system. As I before stated, a discoloration in the part was first observed, which continued gradually to spread and increase in shade, until of considerable extent, and of a jet black color. To what extent of surface it might have spread before being arrested by

the vis medicatrix naturæ, is difficult to say. I found it difficult, even by means of vesicatories and other stimulating dressings to produce a line of separation between the living and the dead parts. The part so soon as it had become black, presented a dry elastic feeling to the sense of touch ; and was very similar to a dry buckskin cushion, stuffed with wool or some soft elastic material. The one on the sacrum had already become abraded when I first observed it, owing no doubt to the patient nccessarily remaining so long in the position of recumbency ; it still continued to spread some time, before sufficient tonicity could be produced to arrest it. Before these ulcers made their appearance on the hip, the patient had been turned to lie on that side occasionally, for the purpose of favoring the one on the back. This circumstance ought to be taken into consideration in accounting for the distinction between them and the ulcer on the sacrum. In these points of ulceration on the hip, although there was no abrasion in consequence of the patient lying on the side, it is probable that the ulcerative process was induced by those points being compressed from the weight of the body. In her extreme emaciation, the circulation must of necessity have been very languid, and have required but little pressure to arrest it altogether.

"With sentiments of esteem,

"WM. LINDSEY."

4. *Unusual Distribution of the Arteries.*—In a subject which lately came under our observation, the two carotid arteries and the right subclavian arose from the aorta by a common trunk. Just above the upper extremity of the sternum, the carotids separated at an acute angle, and proceeded to their usual position by the side of the trachea. About a quarter of an inch from this angle, the right carotid gave off at a right angle, the right subclavian which under the protection of the clavicle pursued its usual course to the axilla. Under the sternal portion of the sterno-cleido mastoideus, the internal mammary artery was given off, and proceeded between the anterior and middle scaleni muscles to the place of its distribution, and immediately opposite the inferior thyroid arose. F.

5. *To the Editors of the Western Medical Journal.*

GENTLEMEN,

In the next number of your Journal, you will probably confer a benefit on practitioners, and the community, by stating, what, from repeated experience, I have found to be a fact, that exposing a plaster of Cantharides, for a minute or two, to the steam of boiling water, effectually neutralizes the virus which causes *Strangury*, without diminishing the vesicating power of the fly. This was suggested to me by a young practitioner in Philadelphia about three years ago. I regret that his name is not remembered.

A patient of mine has also recently taught me, that, covering the plaster with silk paper saturated in vinegar, is a certain preventative of the above painful effect of the cantharides.

Respectfully,

E. A. ATLEY.

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6. *Obituary.*—Died at his residence near Philadelphia, on the 17th April, Dr. JOHN D. GODMAN, late Professor of Anatomy in the Rutgers Medical College of New-York. A sketch of the life and character of this talented and amiable man, will be given in our next number. D.

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*Jefferson Medical College.*—The *Jefferson Medical College* was instituted in Philadelphia, in 1825, and, during its first session, was endowed by an act of the Legislature of Pennsylvania, with power to confer degrees in Medicine, and with all the privileges and prerogatives of similar Institutions, in our own country and in Europe.

Since its foundation nearly 600 students have attended the respective courses of Lectures, and of this number, 145 from various sections of the United States, the Canadas, West Indies, and Europe, have been admitted to the Degree of Doctor of Medicine.

The Sixth Session of the College will commence on the first Monday of November next, and, it is believed, under the most favorable auspices ; every obstacle to its future advancement having been removed, and such measures adopted by the Board of Trustees, as will give a new impulse to the exertions of the faculty. Among these measures, it is thought proper to specify particularly, the appointment of Professor Drake, of Cincinnati,

to the chair of the Practice of Medicine. His reputation as a lecturer is acknowledged, while his practical acquaintance with the diseases most prevalent in the Southern and Western sections of our country, in which a majority of the graduates in medicine may be expected to locate themselves, must greatly enhance the value of his instruction.

The additions which have been made to the Anatomical Cabinet, with the facilities afforded for dissection and demonstration, are such as will bear comparison with those of the oldest Medical Schools on this side of the Atlantic.

In all other respects it is confidently believed, it is not surpassed by any of its sister institutions, with *all* of which, as far as is known, it is placed on a footing of perfect equality—a course of Lectures in one, being held equivalent to a course on the same branches, in every other.

The Alms House and Hospital of the city afford ample opportunities to the student of acquiring clinical instruction, and hours are appropriated to this purpose. An Infirmary for diseases of the eye is also connected with the College, under the direction of the Professor of Surgery, who will operate in the presence of the class, where this is practicable.

The following is the organization of the Medical Faculty—viz:

*Anatomy*—By Samuel McClellen, M. D.
*Materia Medica and Obstetrics*—By John Eberle, M. D.
*Chemistry*—By Jacob Green, M. D.
*Theory and Practice of Medicine*—By Daniel Drake, M. D.
*Surgery*—By George McLellen, M. D.
*Institutes of Medicine, Medical Jurisprudence, and the diseases of women and children*—By B. Rush Rhees, M. D.

The fee for attendance on each course is 15 dollars, or 90 dollars for all the courses. The graduation fee is 15 dollars, and no other charge is made either on matriculation, or subsequently.

The whole expense is therefore less than 200 dollars for the two full courses, required by law to entitle the student to graduation. One of these, at least must be attended in this institution; and it is further required, that the candidate shall have studied three years (inclusive of the terms of attendance on the lectures) under the direction of a respectable practitioner of medicine,—that he shall be twenty one years of age—and having presented a thesis on some medical subject, shall give satisfactory evidence of his qualifications on an examination by the Faculty, which takes place immediately after the close of each session.

The annual commencement for conferring the degrees, will not be delayed beyond the time requisite to complete the examination, that no unnecessary expense may be incurred by the

student for board. This may be procured in Philadelphia, at the rate of from two dollars and fifty cents to four dollars, in very respectable houses, to which the Janitor will furnish references, without charge.

Ten students are by law admitted gratuitously, each session, (the sum of twenty dollars only being paid by each to meet the current expenses of the institution.) Application for the benefit of this provision, and all other communications to the Faculty, must be addressed to Samnel McClellen, M. D. Dean of the Faculty, at the Jefferson Medical College, 10th, near Walnut street, Philadelphia. By order of the Faculty.

SAMUEL McCLELLEN, *Dean.*

*Philadelphia, March*, 1830.

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*Medical Graduates* During the past spring, the degree of Doctor of Medicine has been conferred by the University of Pennsylvania on 125 gentlemen; by the Transylvania University 71; by the Medical College of South Carolina 55; by the University of Maryland 53; by the Medical College of Ohio 26.

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Publishers Notice. We regret to learn that an impression has gone abroad, that Dr. Drake's association with the Jefferson Medical College, will interfere with his editorial duties. Not only will this not be the case, but his connexion with that institution will secure to the Journal a support that cannot fail to render its pages more interesting. We are authorized to state that Dr. D. has no idea of leaving Cincinnati. His associations of the past, and his prospects for the future, are all connected with the West, and will secure his permanent residence on this side of the mountains.

We have succeeded in getting out the first number of this volume within the time mentioned in our prospectus, and hope for the future to present it punctually to our subscribers. A similar punctuality on their part will afford the best evidence of their approbation, and most effectually secure our best exertions to gratify and instruct them.

Publishers.

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